

MMWRTM
MORBIDITY AND MORTALITY
WEEKLY REPORT

- 1 Summaries of Notifiable Diseases
in the United States, 1999
- 17 Graphs and Maps for Selected Notifiable Diseases
in the United States
- 81 Historical Summaries of Notifiable Diseases
in the United States, 1968-1999
- 91 Selected Reading

**Summary
of
Notifiable Diseases,
United States**

1999

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention (CDC)
Atlanta, GA 30333



The statistical summary of notifiable diseases in the United States is published to accompany each volume of the *Morbidity and Mortality Weekly Report* by the Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, Georgia 30333.

SUGGESTED CITATION

Centers for Disease Control and Prevention. *Summary of notifiable diseases, United States, 1999*. MMWR 1999;48(No. 53):[inclusive page numbers].

Centers for Disease Control and Prevention Jeffrey P. Koplan, M.D., M.P.H.
Director

The material in this report was collected and forwarded to CDC by the 57 reporting areas. The production of this report as an *MMWR* serial publication was coordinated in:

Epidemiology Program Office Stephen B. Thacker, M.D, M.Sc.
Director

Division of Public Health Surveillance
and Informatics Donna F. Stroup, Ph.D., M.Sc.
Acting Director

Office of Scientific and Health Communications John W. Ward, M.D.
Director
Editor, MMWR Series

Suzanne M. Hewitt, M.P.A.
Managing Editor,
Public Health Publications Activity

Amanda Crowell
Project Editor

Morie M. Higgins
Visual Information Specialist

Michele D. Renshaw
Erica R. Shaver
Information Technology Specialists

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites.

The following CDC staff members contributed to this report:

Samuel L. Groseclose, D.V.M., M.P.H.

Patsy A. Hall

Carol M. Knowles

Deborah A. Adams

Suzette Park

Felicia Perry

Pearl Sharp

Willie J. Anderson

Kathryn Snavelly

Robert F. Fagan

J. Javier Aponte

Gerald F. Jones

David A. Nitschke

Carol A. Worsham

M. Kathleen Glynn, D.V.M., M.P.V.M.

Man-Huei Chang, M.P.H.

Timothy Doyle, M.P.H.

Ruth Ann Jajosky, D.M.D., M.P.H.

*Division of Public Health Surveillance and Informatics
Epidemiology Program Office*

in collaboration with

Scott Noldy

EDS, Corp.

Contents

Preface	iv
Background	v
Data Sources	vii
Interpreting Data	viii
Highlights	ix
Part 1. Summaries of Notifiable Diseases in the United States, 1999	1
Table 1. Reported cases by month, 1999	3
Table 2. Reported cases by geographic division and area, 1999	4
Table 3. Reported cases and incidence rates by age group, 1999	12
Table 4. Reported cases and incidence rates by sex, 1999	13
Table 5. Reported cases and incidence rates by race, 1999	14
Table 6. Reported cases and incidence rates by ethnicity, 1999	15
Part 2. Graphs and Maps for Selected Notifiable Diseases in the United States	17
Part 3. Historical Summaries of Notifiable Diseases in the United States, 1968-1999	81
Table 7. Summary of reported cases per 100,000 population, 1989-1999	82
Table 8. Summary of reported cases, 1992-1999	84
Table 9. Summary of reported cases, 1984-1991	86
Table 10. Summary of reported cases, 1976-1983	88
Table 11. Summary of reported cases, 1968-1975	89
Table 12. Deaths from selected diseases, 1989-1998	90
Selected Reading	91
State and Territorial Epidemiologists and Laboratory Directors	Inside back cover

Preface

The *MMWR Summary of Notifiable Diseases, United States, 1999* contains, in tabular and graphical form, the official statistics for the reported occurrence of nationally notifiable diseases in the United States for 1999. These statistics are collected and compiled from reports to the National Notifiable Diseases Surveillance System (NNDSS), which is operated by CDC in collaboration with the Council of State and Territorial Epidemiologists (CSTE).

The *Summary* is located on the Internet at <<http://www2.cdc.gov/mmwr/summary.html>>. This site also includes publications from past years.

Because the dates of onset or diagnosis for notifiable diseases are not always reported, these surveillance data are presented by the week they were reported to CDC by public health officials in state and territorial health departments. These data are finalized and published each year in the *Summary* for use by state and local health departments; schools of medicine and public health; communications media; local, state, and federal agencies; and other agencies or persons interested in following the trends of reportable diseases in the United States. This publication also documents which diseases are considered national priorities for notification and the annual number of cases of such diseases.

The Highlights section presents information on selected nationally notifiable diseases to provide a context in which to interpret surveillance and disease-trend data and to provide further information on the epidemiology and prevention of selected diseases. Past publications included information on selected non-notifiable diseases, but this year's *Summary* presents only highlights of nationally notifiable diseases.

Part 1 contains tables that present incidence data for each of the diseases considered nationally notifiable during 1999.* The tables provide the number of cases of notifiable diseases reported to CDC for 1999, as well as the distribution of cases by month and geographic location and by patient's age, sex, race, and Hispanic ethnicity. The data are final totals as of August 15, 2000, unless otherwise noted. In all tables, leprosy is listed as Hansen disease, and tickborne typhus fever is listed as Rocky Mountain spotted fever (RMSF).

Part 2 contains graphs and maps. These graphs and maps depict summary data for many of the notifiable diseases described in tabular form in Part 1.

Part 3 contains tables that list the number of cases of notifiable diseases reported to CDC since 1968. This section also includes a table enumerating deaths associated with specified notifiable diseases reported to the National Center for Health Statistics (NCHS), CDC, during 1989–1998.

The Selected Reading section presents general and disease-specific references for notifiable infectious diseases. These references provide additional information on surveillance and epidemiologic issues, diagnostic issues, or disease control activities.

*Because no cases of anthrax, human rabies, or paralytic poliomyelitis were reported in the United States during 1999, these diseases do not appear in the tables in Part 1.

Background

As of January 1, 1999, a total of 58 infectious diseases were designated as notifiable at the national level. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. This section briefly summarizes the history of the reporting of nationally notifiable diseases in the United States.

In 1878, Congress authorized the U.S. Marine Hospital Service (i.e., the forerunner of the Public Health Service [PHS]) to collect morbidity reports regarding cholera, smallpox, plague, and yellow fever from U.S. consuls overseas. The intention was to use this information to institute quarantine measures to prevent the introduction and spread of these diseases into the United States. In 1879, a specific Congressional appropriation was made for the collection and publication of reports of these notifiable diseases. Congress expanded the authority for weekly reporting and publication of these reports in 1893 to include data from states and municipal authorities. To increase the uniformity of the data, Congress enacted a law in 1902 directing the Surgeon General to provide forms for the collection and compilation of data and for the publication of reports at the national level. In 1912, state and territorial health authorities — in conjunction with PHS — recommended immediate telegraphic reporting of five infectious diseases and the monthly reporting, by letter, of 10 additional diseases. The first annual summary of *The Notifiable Diseases* in 1912 included reports of 10 diseases from 19 states, the District of Columbia, and Hawaii. By 1928, all states, the District of Columbia, Hawaii, and Puerto Rico were participating in national reporting of 29 specified diseases. At their annual meeting in 1950, state and territorial health officers authorized the Council of State and Territorial Epidemiologists (CSTE) to determine which diseases should be reported to PHS. In 1961, CDC assumed responsibility for the collection and publication of data concerning nationally notifiable diseases.

The list of nationally notifiable diseases is revised periodically. For example, a disease might be added to the list as a new pathogen emerges, or a disease might be deleted as its incidence declines. Public health officials at state health departments and CDC continue to collaborate in determining which diseases should be nationally notifiable. CSTE, with input from CDC, makes recommendations annually for additions and deletions. Although disease reporting is mandated (i.e., by legislation or regulation) at the state and local levels, state reporting to CDC is voluntary. Thus, the list of diseases considered notifiable varies slightly by state. All states generally report the internationally quarantinable diseases (i.e., cholera, plague, and yellow fever) in compliance with the World Health Organization's International Health Regulations.

The list of infectious diseases designated as notifiable at the national level during 1999 is as follows:

**Infectious Diseases Designated
as Notifiable at the National Level During 1999**

Acquired immunodeficiency syndrome (AIDS)	<i>Haemophilus influenzae</i> , invasive disease	Rabies, human
Anthrax	Hansen disease (leprosy)	Rocky Mountain spotted fever
Botulism	Hantavirus pulmonary syndrome	Rubella
Brucellosis	Hemolytic uremic syndrome, postdiarrheal	Rubella, congenital syndrome
Chancroid	Hepatitis A	Salmonellosis
<i>Chlamydia trachomatis</i> , genital infection	Hepatitis B	Shigellosis
Cholera	Hepatitis C; non-A, non-B	Streptococcal disease, invasive, group A
Coccidioidomycosis	Human immunodeficiency virus (HIV) infection, adult	<i>Streptococcus pneumoniae</i> , drug-resistant, invasive disease
Cryptosporidiosis	HIV infection, pediatric	Streptococcal toxic-shock syndrome
Cyclosporiasis	Legionellosis	Syphilis
Diphtheria	Lyme disease	Syphilis, congenital
Ehrlichiosis, human granulocytic	Malaria	Tetanus
Ehrlichiosis, human monocytic	Measles	Toxic-shock syndrome
Encephalitis, California serogroup viral	Meningococcal disease	Trichinosis
Encephalitis, eastern equine	Mumps	Tuberculosis
Encephalitis, St. Louis	Pertussis	Typhoid fever
Encephalitis, western equine	Plague	Varicella (chickenpox)*
<i>Escherichia coli</i> O157:H7	Poliomyelitis, paralytic	Varicella deaths
Gonorrhea	Psittacosis	Yellow fever
	Rabies, animal	

*Although varicella (chickenpox) is not a nationally notifiable disease, the Council of State and Territorial Epidemiologists recommends reporting cases of this disease to CDC.

Data Sources

Provisional data concerning the reported occurrence of notifiable diseases are published weekly in the *MMWR*. After each reporting year, staff in state health departments finalize reports of cases for that year with local or county health departments and reconcile the data with reports previously sent to CDC throughout the year. These data are compiled in final form in the *Summary*.

Notifiable disease reports are the authoritative and archival counts of cases. They must be approved by the appropriate epidemiologist from each submitting state or territory before being published in the *Summary*. Although useful for detailed epidemiologic analyses, data published in *CDC Surveillance Summaries* or other surveillance reports produced by CDC programs can be different from data reported in the annual summary because of differences in the timing of reports, the source of the data, and the case definitions.

Data in the *Summary* were derived primarily from reports transmitted to the Division of Public Health Surveillance and Informatics, Epidemiology Program Office, CDC, from health departments in the 50 states, five territories, New York City, and the District of Columbia through the National Electronic Telecommunications System for Surveillance (NETSS). More information regarding NETSS and notifiable diseases, including case definitions for these conditions, is available on the Internet at <http://www.cdc.gov/epo/phs.htm>. Policies for reporting notifiable disease cases can vary by disease or reporting jurisdiction, depending on case status classification (i.e., confirmed, probable, or suspect).

Final data for selected diseases (presented in Parts 1, 2, and 3) are from the surveillance records of the CDC programs listed below. Requests for further information regarding these data should be directed to the appropriate program.

National Center for Health Statistics (NCHS)

Office of Vital and Health Statistics Systems (deaths from selected notifiable diseases).

National Center for Infectious Diseases (NCID)

Division of Bacterial and Mycotic Diseases (toxic-shock syndrome; streptococcal disease, invasive, group A; streptococcal toxic-shock syndrome; and laboratory data regarding botulism, *Escherichia coli* O157:H7, salmonellosis, and shigellosis).

Division of Viral and Rickettsial Diseases (animal rabies, hantavirus pulmonary syndrome).

National Center for HIV, STD, and TB Prevention (NCHSTP)

Division of HIV/AIDS Prevention — Surveillance and Epidemiology (acquired immunodeficiency syndrome [AIDS]).

Division of Sexually Transmitted Diseases Prevention (chancroid, chlamydia, gonorrhea, and syphilis).

Division of Tuberculosis Elimination (tuberculosis).

National Immunization Program (NIP)

Epidemiology and Surveillance Division (poliomyelitis; *Haemophilus influenzae*, invasive disease, type B; and varicella).

Disease totals for the United States, unless otherwise stated, do not include data for American Samoa, Guam, Puerto Rico, the U.S. Virgin Islands, or the Commonwealth of the Northern Mariana Islands (CNMI).

Population estimates for the states are from the July 1, 1999, estimates by the U.S. Department of Commerce, Economics, and Statistics Administration, Bureau of the Census, Population Division, Population Distribution Branch, Internet press release ST-99-1, December 29, 1999.* Population numbers for territories are 1998 estimates from Bureau of the Census press release PR-99-1* and CB98-219.[†] More information regarding census estimates is available at <<http://www.census.gov/>>.

Rates in the *Summary* are presented as incidence rates per 100,000 population, based on data for the U.S. total-resident population. However, population data from states in which diseases were not notifiable or disease data were not available were excluded from rate calculations.

Interpreting Data

The data reported in the *Summary* are useful for analyzing disease trends and determining relative disease burdens. However, these data must be interpreted in light of reporting practices. Some diseases that cause severe clinical illness (e.g., plague and rabies) are most likely reported accurately, if they were diagnosed by a clinician. However, persons who have diseases that are clinically mild and infrequently associated with serious consequences (e.g., salmonellosis) might not seek medical care from a health-care provider. Even if these less severe diseases are diagnosed, they are less likely to be reported.

The degree of completeness of data reporting also is influenced by the diagnostic facilities available; the control measures in effect; the public awareness of a specific disease; and the interests, resources, and priorities of state and local officials responsible for disease control and public health surveillance. Finally, factors such as changes in the case definitions for public health surveillance, the introduction of new diagnostic tests, or the discovery of new disease entities can cause changes in disease reporting that are independent of the true incidence of disease.

Public health surveillance data are published for selected racial and ethnic population groups because these variables can be risk markers for certain notifiable diseases. Risk markers can identify potential risk factors for investigation in future studies. Race and ethnicity data also can be used to target populations for prevention efforts. However, caution must be used when drawing conclusions from reported race and ethnicity data. Certain racial/ethnic population groups have differential patterns of access to health care, potentially resulting in data that are not representative of disease incidence in these populations.

In addition, not all race and ethnicity data are collected uniformly for all diseases. For example, in NCHSTP, the Division of HIV/AIDS Prevention — Surveillance and Epidemiology and the Division of Sexually Transmitted Diseases Prevention collect race/ethnicity data using a single variable. A person's race/ethnicity is reported as American Indian/Alaskan Native, Asian/Pacific Islander, black non-Hispanic, white non-Hispanic, or Hispanic. Additionally, although the recommended standard for classifying a person's race or ethnicity is based on self-reporting, this procedure might not always be followed.

* Available at <<http://www.census.gov/population/estimates/state/st-99-1.txt>>. Accessed January 29, 2001.

[†] Available at <<http://www.census.gov/Press-Release/cb98-219.html>>. Accessed January 29, 2001.

Highlights for 1999

The Highlights section presents information on the public health importance of selected nationally notifiable diseases, including a) domestic and some international disease outbreaks, b) active surveillance findings, c) changes in data reporting practices, d) the impact of prevention programs, e) the emergence of antimicrobial resistance, and f) changes in immunization policies. This information is intended to provide a context in which to interpret surveillance and disease-trend data and to provide further information on the epidemiology and prevention of selected diseases.

AIDS

The annual incidence of acquired immunodeficiency syndrome (AIDS) and deaths among persons with AIDS declined during 1996, reflecting the beneficial impact of newly available therapies. Although this trend continued through 1998, provisional data for 1999 suggest that the number of AIDS cases and deaths might be leveling. Before the widespread availability of effective treatments, AIDS surveillance data were representative of underlying trends in human immunodeficiency virus (HIV) transmission. Because of changes in the epidemiology of AIDS associated with treatment successes, AIDS incidence no longer accurately reflects HIV incidence trends. AIDS data now reflect a combination of factors, including a) variation in HIV transmission patterns over a long period, b) differences in access to and use of testing and treatment among populations who are at risk or infected, and c) treatment regimens that might be failing because of drug resistance and poor adherence.

To provide better data for HIV prevention efforts, CDC and the Council of State and Territorial Epidemiologists (CSTE) have recommended that national surveillance expand to include both HIV infection and AIDS cases (*MMWR* 1999;48[RR-13]; CSTE position statement ID-4, 1997). An integrated national HIV/AIDS surveillance system would provide information regarding persons in whom HIV infection has been newly diagnosed, persons with severe HIV disease (AIDS), and those dying of HIV disease. Currently, at the local level, 33 states and 1 U.S. territory report HIV infections by the patient's name, 6 states and 1 U.S. territory use codes provided by health-care providers for HIV reporting, and 2 states convert names to codes after a report is received.

Chancroid

In 1999, a total of 143 cases of chancroid was reported to CDC, for a rate of 0.1 cases/100,000 population. The number of cases reported in 1999 represent a 24.3% decline from 1998 and a continuing decline since 1987. However, chancroid is difficult to culture and could be substantially underdiagnosed. Several studies that have used DNA amplification tests (which are not commercially available) have identified this infection in cities where it was previously undetected (*J Infect Dis* 1998;178:1795-8).

Chlamydia trachomatis, Genital Infection

In 1999, a total of 656,721 cases of genital chlamydial infection was reported to CDC, for a rate of 254.1 cases/100,000 population. This is the highest rate of chlamydial infection reported to CDC since voluntary case reporting began in the mid-1980s. It is also the highest rate since genital chlamydial infection became a nationally notifiable disease in 1995. This increase is primarily caused by the continued expansion of chlamydia screening programs and the increased use of more sensitive diagnostic tests for this condition. Since the late 1980s, data on chlamydia prevalence obtained by monitoring test positivity rates of persons screened in different clinic settings have generally

documented declining levels of infection in many parts of the United States (CDC. Sexually transmitted disease surveillance 1999 supplement: Chlamydia Prevalence Monitoring Project. November 2000).

Cholera

During 1995–1999, a total of 53 laboratory-confirmed cases of cholera, all caused by *Vibrio cholerae* O1, was reported to CDC. Twenty-nine (53%) patients were hospitalized, and one died. Thirty-six (68%) infections were acquired outside the United States, whereas four (8%) were acquired through consumption of contaminated seafood harvested in Gulf Coast waters. Among travel-associated cholera cases, 32% of isolates were resistant to trimethoprim-sulfamethoxazole, sulfisoxazole, streptomycin, and furazolidone. Thus, foreign travel and contaminated seafood continue to account for most cholera cases in the United States, and antimicrobial resistance is increasing among *V. cholerae* O1 strains isolated from ill travelers.

Diphtheria

In 1999, no probable or confirmed cases of toxigenic *Corynebacterium diphtheriae* were reported in the United States. However, one man aged 75 years who had visited a nondairy cattle farm 2 weeks earlier died of an illness clinically consistent with respiratory diphtheria. A toxigenic strain of *C. ulcerans* was isolated from a throat swab from the patient. *C. ulcerans* is primarily an animal pathogen, but can be toxigenic and cause fatal or nonfatal clinical respiratory diphtheria in humans.

Gonorrhea

In 1999, a total of 360,076 cases of gonorrhea was reported to CDC, for a rate of 133.2 cases/100,000 population. This was a 9.2% increase over the 1997 rate (122.0/100,000) and a 1.2% increase over the 1998 rate (131.6/100,000). Possible reasons for this trend include expansion of screening programs (motivated by the availability of simultaneous testing for genital chlamydial infections), increased use of new diagnostic tests with improved sensitivity, improvements in surveillance systems, and true increases in morbidity in some geographic areas and segments of the population.

***Haemophilus influenzae*, Invasive Disease**

In 1999, a total of 261 cases of *Haemophilus influenzae* (Hi) invasive disease among children aged <5 years was reported (data was provided by the National Immunization Program and were based on date of onset, not MMWR week). Before a vaccine was introduced in 1987, approximately 20,000 cases of *H. influenzae* type b (Hib) invasive disease occurred among children annually (JAMA 1993;269:221–6). Because of widespread use of the Hib vaccine among preschool-aged children, the number of Hib cases has declined sharply. Of the 261 cases reported during 1999, a total of 215 (82%) Hi isolates were serotyped, and 71 (33%) of these were type b. Among the 71 cases of Hib invasive disease reported among children aged <5 years, 30 (42%) were among those aged <6 months, which is too young to have completed a three-dose primary Hib vaccination. However, 23 (56%) of the 41 children who were old enough (i.e., aged ≥6 months) to have completed a three-dose primary series either had unknown vaccination status (3 children) or were incompletely vaccinated (20 children). These cases might have been prevented with age-appropriate vaccination.

Hantavirus Pulmonary Syndrome

In 1999, a total of 42 probable cases of hantavirus pulmonary syndrome (HPS) from 15 states was reported to CDC's National Center for Infectious Diseases; of the 33 cases that were laboratory confirmed by CDC, 10 (30%) were fatal. CDC also confirmed two case-patients with hantavirus infection that did not develop into HPS. Since surveillance began in 1993, cases of HPS have been reported from Canada, Argentina, Paraguay, Brazil, Uruguay, Chile, and Bolivia. Cases with onset in 1999 were retrospectively recognized from Panama, the first Central American country to report HPS. HPS is caused by several hantaviruses in the Western Hemisphere, and most have specific sigmodontine rodent reservoirs of the family *Muridae*. Although most HPS in the United States is caused by Sin Nombre virus and its variants (i.e., New York and Monongahela), some cases have been associated with other hantaviruses, including Bayou and Black Creek Canal. Virus is shed in rodent urine, feces, and saliva, then transmitted through inhalation.

Hemolytic Uremic Syndrome, Postdiarrheal

Postdiarrheal hemolytic uremic syndrome (HUS) is a life-threatening illness characterized by hemolytic anemia, thrombocytopenia, and renal injury. In the United States, most cases are caused by infection with *Escherichia coli* O157:H7 or other Shiga toxin-producing *E. coli*. In 1999, the fourth year of national reporting, 26 states reported 181 cases of postdiarrheal HUS to CDC. The median age of patients was 4 years (range: <1-93), and 58% of patients were female. Illness was seasonal, with 54% of cases occurring during June-September.

By comparison, 17 states reported 119 cases in 1998, and 20 states reported 93 cases in 1997. Although the number of areas reporting and the number of cases reported increased in 1999, eight states and at least one territory did not list HUS as a notifiable disease in 1999, contributing to substantial underreporting.

Hepatitis A

Routine childhood hepatitis A vaccination is recommended in the 11 states where the average annual hepatitis A rate during 1987-1997 was ≥ 20 cases/100,000 population (i.e., approximately twice the national average). Routine childhood vaccination should be considered in the six states where the average rate during 1987-1997 was at least 10 cases/100,000 population, but < 20 /100,000 population.

The overall rate of hepatitis A reported during 1999 was the lowest recorded. However, because hepatitis A rates tend to vary from year to year and from region to region, determining whether this low rate is caused by routine immunization or the natural variability in infection rates is impossible. Monitoring the incidence of hepatitis A to determine if these low rates are sustained over time is critical to assessing the impact of routine vaccination.

Hepatitis B

Reported cases of acute hepatitis B have decreased $> 60\%$ during the past decade, from 21,102 cases in 1990 to 7,694 cases in 1999. Surveillance data are being used to monitor the impact of the national strategy for eliminating hepatitis B virus (HBV) infection. *Healthy People 2010* objectives call for a 75-90% reduction in the national incidence of hepatitis B among adults (baseline: 15-24 cases/100,000 persons), a 99% reduction among children aged 2-18 years (baseline: 945 cases/year), and a 75% reduction in the number of perinatal HBV infections (baseline: 1,682 infections/year).

Reported hepatitis B cases can be used to monitor the occurrence of disease among adults. However, because most infections among infants and young children are asymptomatic, reported cases underestimate the incidence of disease in these age groups. Thus, data from other sources (e.g., serosurveys) are needed to monitor progress toward eliminating HBV transmission among younger age groups.

Hepatitis C; Non-A, Non-B

Cases of hepatitis C reported to the National Notifiable Disease Surveillance System (NNDSS) are considered unreliable because a) there is no serologic marker for acute infection and b) most health departments do not have the resources to determine if a positive laboratory report for hepatitis C virus (HCV) infection represents acute infection, chronic infection, repeated testing of a person previously reported, or a false-positive result. Historically, the most reliable national estimates of acute disease incidence have come from sentinel surveillance. After adjusting for underreporting and asymptomatic infections, the annual number of new infections has decreased >80% since 1989 to 38,000 cases in 1997 (CDC, unpublished data, 1999). Because surveillance for acute hepatitis C provides the best means to evaluate the effectiveness of prevention efforts and identify missed opportunities for prevention, efforts are underway to help states improve and establish surveillance.

HIV Infection, Adult

In 1998–1999, reports based on AIDS data indicated that the recent decline in AIDS cases and deaths was slowing. Because of improvements in treatment and care of persons infected with HIV, these data could represent a) persons whose treatment was unsuccessful, b) persons who were not tested for HIV before developing AIDS, or c) persons who did not seek or have access to testing and treatment earlier. Public health officials need data concerning persons in whom HIV infection was diagnosed before AIDS to determine who could benefit from prevention and treatment services. In June 1997, reporting of HIV infection among adults and adolescents (i.e., persons aged ≥ 13 years) was added to the list of nationally notifiable diseases at the annual CSTE meeting. CSTE recommended that all states and U.S. territories implement confidential HIV infection reporting based on methods that provide accurate and representative data for all persons diagnosed confidentially. Recommendations for implementing national HIV case surveillance were published in December 1999, and the revised surveillance case definition became effective January 1, 2000. Currently, 33 states and the U.S. Virgin Islands have implemented confidential reporting of HIV among adults and adolescents as an extension of current AIDS surveillance.

HIV Infection, Pediatric

In 1999, AIDS surveillance data indicated continued, substantial declines in perinatally acquired AIDS, reflecting declines in perinatal HIV transmission. HIV surveillance data indicated that the increasing use of zidovudine by mothers and newborns was temporally associated with this decline, demonstrating success in nationwide efforts to implement Public Health Service guidelines for routine, voluntary prenatal HIV testing (*MMWR* 1995;44[No. RR-7]) and the use of zidovudine to reduce perinatal HIV transmission (*MMWR* 1998;47[RR-2]).

States that conduct surveillance for perinatally exposed and infected children aged <13 years can evaluate the impact of the guidelines and document resources needed to care for perinatally exposed infants. In 1999, a total of 33 states and the U.S. Virgin

Islands conducted surveillance for HIV infection among children, reporting 233 children whose infection had not progressed to AIDS and 123 children who had AIDS. These states also received 2,004 new reports of perinatally exposed children who required follow-up with health-care providers to determine their HIV infection status. Recommendations for implementing a national HIV case surveillance were published in December 1999, and the revised surveillance case definition became effective January 1, 2000. Enhanced programmatic and surveillance efforts to further reduce perinatal HIV transmission are underway.

Lyme Disease

In 1999, approximately 16,273 cases of Lyme disease were reported to CDC. Most cases continue to be reported from the northeastern and north-central United States. CDC promotes community-based prevention of Lyme disease using a combination of strategies aimed at reducing vector tick densities, preventing human exposure to infected vector ticks, and vaccinating persons aged 15–70 years when appropriate. A model prevention project is underway in a community in Connecticut. CDC plans to expand prevention projects to other endemic areas.

Measles

In 1999, a total of 100 confirmed cases of measles was reported. Thirty-one states and the District of Columbia reported no confirmed measles cases. Forty-two case-patients were aged <5 years, 26 were aged 5–19 years, and 32 were aged ≥20 years. Eleven outbreaks (range: 3–15 cases) were reported. Of the 100 cases reported, 33 were imported from outside the United States, and exposure to these case-patients caused 33 additional cases. The remaining 34 cases were of unknown source. Genotypic analysis of isolated measles viruses in seven chains of transmission showed no evidence of an endemic strain (*MMWR* 2000;49:557–60). In 1999, CDC convened a panel of expert consultants to review the information on measles epidemiology, molecular virology, surveillance quality, and population immunity in the United States. The experts concluded that measles is not currently endemic in the United States. Because of the continued threat of imported measles, high population immunity must be maintained to continue low levels of transmission.

Pertussis

Since 1980, the number of reported cases of pertussis has increased in the United States. The reasons for this rise are unknown, but could include increased awareness of pertussis among health-care providers, increased use of more sensitive diagnostic tests, and better reporting of cases to health departments. Of 7,288 cases reported during 1999, a total of 27% occurred among children aged <7 months, who were too young to have received the recommended three doses of a pertussis-containing vaccine; 11% were among preschool-aged children (i.e., those aged 1–4 years); and 28% were among children aged 10–19 years. Since 1995, the coverage rate with at least three doses of a pertussis-containing vaccine has been 95% among U.S. children aged 19–35 months (*MMWR* 2000;49:585–9). Because vaccine-induced immunity wanes approximately 5–10 years after pertussis vaccination, adolescents can become susceptible to disease. Since 1990, the incidence of pertussis among preschool-aged children has not changed, but the incidence among adolescents has increased in some states (*Clin Inf Dis* 1999;28:1230–7).

Poliomyelitis, Paralytic

A sequential schedule of inactivated poliovirus vaccine (IPV) and live, attenuated oral poliovirus vaccine (OPV) (i.e., two doses of IPV followed by two doses of OPV) was introduced in 1997 for routine childhood polio vaccination in the United States. Since implementation of this schedule, five cases of vaccine-associated paralytic poliomyelitis (VAPP) with onset in 1997 and two cases with onset in 1998 have been confirmed. Three of these cases were associated with administration of the first or second dose of OPV to children who had not previously received IPV, and one of the 1998 cases was associated with the third dose of OPV. Before the sequential schedule, the average annual number of VAPP cases was eight, which suggests that VAPP has declined since introduction of the sequential schedule. Continued monitoring with additional observation time is required to confirm these preliminary findings because of potential delays in reporting. Further reductions are expected because the Advisory Committee on Immunization Practices (ACIP) has approved an all-IPV schedule beginning January 2000, which is intended to eliminate the risk for VAPP.

Rubella and Rubella, Congenital Syndrome

During the 1990s, rubella cases declined substantially in the United States, from 1,125 reported cases in 1990 to 267 reported cases in 1999. Since 1997, approximately 19 rubella outbreaks have occurred in the United States, mostly among persons born in countries that do not have routine rubella vaccination programs or that have only recently implemented such programs. During the 1990s, <10 cases of congenital rubella syndrome have been reported annually; most cases were among infants born to mothers born outside the United States.

Shigellosis

Shigella sonnei infections continue to account for most shigellosis in the United States. Prolonged, communitywide outbreaks of *S. sonnei* infections that are transmitted in child care centers and other settings where maintenance of good hygienic conditions requires special care account for much of the problem. *S. sonnei* can also be transmitted through contaminated foods and through water used for drinking or recreational purposes.

Streptococcal Disease, Invasive, Group A

In 1999, approximately 10,200 cases of invasive group A streptococcal (GAS) disease and 1,200 deaths occurred nationally, according to reports from the Active Bacterial Core Surveillance (ABCs) project under CDC's Emerging Infections Program. This program operates in eight states (California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee). During 1999, the incidence of this disease was 3.8 cases/100,000 population. Rates were highest among children aged <1 year (4.6 cases/100,000) and adults aged ≥ 65 years (9.2 cases/100,000). Streptococcal toxic-shock syndrome and necrotizing fasciitis accounted for approximately 3.4% and 6.0% of invasive cases, respectively. The overall case-fatality rate among patients with invasive GAS disease was 11.8%. CDC identifies invasive GAS isolates based on sequences of the variable portion of the M-protein gene (i.e., *emm* typing); 9.3% of the 645 GAS isolates submitted and *emm* typed in 1999 were newly recognized *emm* types.

***Streptococcus pneumoniae*, Drug-Resistant, Invasive Disease**

In 1999, the ABCs project of CDC's Emerging Infections Program collected information on invasive pneumococcal disease, including drug-resistant *Streptococcus pneumoniae*, in eight states (California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee). Of the 3,745 *S. pneumoniae* isolates collected, 10.3% exhibited intermediate resistance to penicillin (minimum inhibitory concentration [MIC] 0.1–1 ug/mL), and 16.7% were fully resistant (MIC \geq 2 ug/mL). For cefotaxime, 11.1% of all isolates had intermediate resistance and 5.9% were resistant. For erythromycin, 20.7% were resistant. Nearly 1 in 5 (18%) isolates were not susceptible to \geq 3 classes of drugs commonly used to treat pneumococcal infections. In February 2000, the U.S. Food and Drug Administration licensed a pneumococcal conjugate vaccine for use in infants and young children. Information is available on the Internet at <<http://www.fda.gov/cber/products/pneuled021700.htm>>. Among isolates from children aged <5 years reported to ABCs during 1999, a total of 76.7% of all strains (n=977) and 81.4% of strains not susceptible to penicillin (n=370) were serotypes included in this 7-valent vaccine.

Syphilis, Congenital

In 1999, a total of 556 cases of congenital syphilis was reported to CDC, for a rate of 14.3 cases/100,000 live births. Like primary and secondary syphilis, the rate of congenital syphilis has declined sharply in recent years, from a peak of 107.3/100,000 in 1991. Congenital syphilis persists in the United States because a substantial number of women don't receive syphilis serologic testing until late in their pregnancy or not at all. This lack of screening is often related to a lack of prenatal care or late prenatal care (MMWR 1999;48:757–61).

Syphilis, Primary and Secondary

In 1999, a total of 6,657 primary and secondary syphilis cases was reported to CDC. During 1990–1998, the primary and secondary syphilis rate declined 88%, from 20.3 cases/100,000 population to 2.5/100,000. This is the lowest level since reporting began in 1941. Although syphilis has declined in all regions of the United States and in all racial/ethnic groups, rates remain disproportionately high in the South and among non-Hispanic blacks, and focal outbreaks continue to occur, including recent outbreaks among men who have sex with men.

Tetanus

In 1999, a total of 40 cases of tetanus was reported. Five (12.5%) cases were among persons aged <25 years, 22 (55.0%) were among persons aged 25–59 years, and 13 (32.5%) were among persons aged >59 years. The percentage of cases among persons aged 25–59 years has increased during the last decade; previously, most cases were among persons aged >59 years. Seven of the cases among persons aged 25–59 years were reported in intravenous drug users; two of these cases were fatal. Two cases were in children (aged 4 and 5 years) who had never been vaccinated against tetanus because of their parents' philosophic objection to vaccination.

Tuberculosis

In 1999, a total of 17,531 tuberculosis (TB) cases (rate: 6.4 cases/100,000 population) was reported to CDC from all states and the District of Columbia. This is a 5% decrease from 1998 and a 34% decrease from 1992, when cases peaked during the resurgence of

TB in the United States. During 1992–1999, TB cases among U.S.-born persons decreased 49%, whereas cases among foreign-born persons increased 4%. Since 1993, when states began reporting initial drug susceptibility results to CDC, the number of multidrug-resistant TB (MDR TB) cases among persons with no history of TB decreased from >400 (2.5%) to <150 (1.1%).

These declines appear to be the result of successful efforts to strengthen TB control after the resurgence of TB and the emergence of MDR TB. The relatively stable number of cases reported among foreign-born persons supports the inference that most cases are caused by infection with *Mycobacterium tuberculosis* in the person's country of origin. CDC has collaborated with state and local health departments to publish recommendations for enhancing TB control efforts among foreign-born persons and is working with these jurisdictions to expand current efforts based on these recommendations (MMWR 1998;47[No. RR-16]).

Typhoid Fever

In 1999, typhoid fever was diagnosed in 346 persons in the United States. Despite the availability of effective vaccines, NNDSS reports 300–400 cases each year. Approximately 80% of these cases occur among persons who report international travel during the preceding 6 weeks. Persons traveling to and from their country of origin appear to be at high risk (JAMA 2000;283:2668–73). In many areas of the world, *Salmonella* Typhi strains have acquired resistance to multiple antimicrobial agents, including ampicillin, chloramphenicol, and trimethoprim-sulfamethoxazole (JAMA 2000;283:2668–73).

Varicella

In 1995, varicella vaccine was licensed in the United States. During 1999, vaccine coverage among children aged 19–35 months was 59%. Although varicella is not a nationally notifiable disease, seven states maintained adequate levels of reporting by reporting varicella cases constituting $\geq 5\%$ of their birth cohort during 1990–1995. Although the number of reported cases varied annually, the number declined steadily in these states during 1997–1999. The marked decline in reported cases in 1999 is consistent with data from active varicella surveillance (in which attenuation of seasonality and marked decline in reported cases occurred in 1999) and is suggestive of vaccine impact (CDC, unpublished data, 2000). Ongoing surveillance will be important to monitor impact of the varicella vaccination program.

PART 1

Summaries of Notifiable Diseases in the United States, 1999

EXPLANATION OF SYMBOLS USED IN TABLES

Data not available	NA
Report of disease is not required in that jurisdiction (not notifiable)	NN
No reported cases	—
Commonwealth of Northern Mariana Islands	C.N.M.I.
Puerto Rico	P.R.
U.S. Virgin Islands	V.I.

TABLE 1. Reported cases of notifiable diseases,* by month, United States, 1999

Disease	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
AIDS [†]	45,104	3,084	3,878	4,450	3,357	3,784	4,356	3,240	3,887	3,834	3,374	3,567	4,086
Born disease, foodborne	152	1	1	1	1	1	1	1	1	1	1	1	1
Infant	152	3	7	1	7	13	4	11	4	10	14	8	2
Other (includes wound)	38	4	1	1	1	1	4	3	5	1	2	4	10
Brucellosis	182	3	6	2	4	4	4	10	6	4	4	5	30
Chancroid	143	24	24	2	4	4	4	10	6	4	4	5	30
Chlamydia	652,711	153,227	153,227	153,227	153,227	153,227	153,227	153,227	153,227	153,227	153,227	153,227	153,227
Cholera	6	55	113	102	146	163	179	196	211	381	342	181	310
Cryptosporidiosis	2,361	—	—	—	—	—	—	—	—	—	—	—	—
Cyclosporiasis	96	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	1	—	—	—	—	—	—	—	—	—	—	—	—
Human	203	1	3	2	10	12	38	33	17	18	9	10	47
Human granulocytic	99	2	1	2	1	—	4	14	8	5	6	6	37
Human monocytic	70	—	—	—	—	—	1	2	19	14	24	6	4
Encephalitis, California serogroup viral	5	—	—	—	—	—	1	1	—	—	—	—	—
Eastern equine	1	—	—	—	—	—	—	—	—	—	—	—	—
St. Louis	4	—	—	—	—	—	—	—	—	—	—	—	—
Echovirus	4,513	78	77	91	88	167	216	493	509	869	532	325	1,048
Echovirus coli 0157:H7	360,076	—	—	—	—	—	—	—	—	—	—	—	—
Haemophilus influenzae	1,300	77	109	103	94	121	97	138	75	76	101	82	239
Invasive disease	198	1	1	7	5	5	6	3	10	12	13	4	11
Hemolytic uremic syndrome**	33	—	—	—	—	—	—	—	—	—	—	—	—
Hemolytic uremic syndrome, postdiarrheal	181	3	5	4	135	163	14	19	21	14	16	12	82
Hepatitis A	7,087	1,620	1,448	1,316	1,305	1,635	1,115	1,237	1,194	1,325	1,527	1,296	2,201
Hepatitis B	7,084	1,418	1,174	1,014	1,216	1,245	747	1,037	1,077	1,077	1,077	1,077	1,077
Hepatitis C, non-A, non-B	3,111	114	174	170	216	226	257	337	197	253	350	270	478
Legionellosis	1,108	48	67	68	64	68	78	98	76	106	142	91	184
Lyme disease	16,273	253	332	375	433	752	1,306	3,394	2,291	2,038	1,960	1,249	1,902
Malaria	1,000	12	10	8	14	15	2	18	15	3	15	10	34
Meningococcal disease	2,501	156	233	300	216	266	169	205	125	135	188	122	365
Mumps	387	22	35	42	25	38	28	38	18	22	38	24	57
Pertussis (whooping cough)	7,288	305	322	625	651	495	422	527	548	638	730	630	1,405
Poliomyelitis	16	3	1	2	3	—	2	1	1	—	2	2	2
Rabies, animal	6,730	288	421	479	540	746	505	661	590	660	753	474	603
Rocky Mountain spotted fever	579	10	9	13	13	30	53	125	118	118	89	43	45
Rubella, congenital syndrome	9	—	—	1	—	—	—	—	—	—	—	—	—
Rubella	287	9	—	1	—	—	—	—	—	—	—	—	—
Shigellosis	40,556	1,702	1,814	1,788	2,007	3,172	3,253	5,227	4,177	4,152	5,024	3,259	5,023
Shigellosis	17,521	930	942	888	909	1,383	1,253	1,757	1,720	1,850	2,051	1,487	2,441
Streptococcal disease, invasive, group A	2,382	107	189	211	218	294	154	219	113	119	184	171	423
Streptococcal disease, drug-resistant, invasive disease	4,618	114	194	315	281	734	211	333	194	136	250	211	1,845
Streptococcal toxic-shock syndrome	61	1	8	12	8	11	4	2	—	1	3	1	10
Syphilis, congenital age <1 yr ^{††}	556	156	156	156	156	156	156	156	156	156	156	156	156
Syphilis, primary and secondary [†]	35,628	40	3	2	2	2	2	2	2	2	2	2	2
Total (all ages) [†]	113	3	2	2	2	2	2	2	2	2	2	2	2
Tetanus	113	3	2	2	2	2	2	2	2	2	2	2	2
Toxic-shock syndrome	142	12	8	8	7	10	7	10	4	6	4	8	18
Trichinosis	17,531	12	613	1,376	1,529	1,191	1,582	1,822	1,507	1,392	1,454	1,160	3,098
Typhoid fever	348	12	21	24	25	26	24	42	25	35	34	24	44
Varicella (chickenpox)	46,016	4,404	4,596	5,435	3,552	6,949	2,664	1,070	2,498	980	3,036	3,303	7,487
Yellow fever	1	—	—	—	—	—	—	—	—	—	—	—	—

* No cases of anthrax, paralytic poliomyelitis, or human rabies were reported in 1999.

† Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB.

†† Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of August 8, 2000.

‡ Chlamydia refers to genital infections caused by *C. trachomatis*.

§ Totals reported to the Division of Tuberculosis Elimination, NCHSTP, as of June 30, 2000.

|| Totals reported to the Division of Tuberculosis Elimination, NCHSTP, as of May 3, 2000.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area, United States, 1999

Area	Total resident population (in thousands)	AIDS†	Botulism			Brucellosis	Chancroid‡
			Foodborne	Infant	Other‡		
United States	272,682	45,104**	23	92	39	82	143
New England	13,496	2,293	—	1	1	3	2
Maine	1,253	80	—	—	—	—	—
N.H.	1,201	46	—	1	—	—	NN
Vt.	594	20	—	1	—	—	NN
Mass.	6,175	1,454	—	—	1	2	1
R.I.	991	107	—	—	—	—	1
Conn.	3,282	586	—	—	—	1	—
Mid. Atlantic	38,334	11,713	1	24	—	2	39
Upstate N.Y.	10,827	1,690	1	—	—	2	—
N.Y. City	7,370	6,013	—	—	—	—	39
N.J.	8,143	2,043	—	14	—	—	—
Pa.	11,994	1,967	—	9	—	—	—
E.N. Central	44,442	3,268	1	2	—	14	4
Ohio	11,257	547	—	1	—	—	—
Ind.	5,943	363	1	—	—	1	—
Ill.	12,128	1,557	—	—	—	10	NN
Mich.	9,864	649	—	—	—	2	—
Wis.	5,250	152	—	1	—	—	4
W.N. Central	18,800	1,869	1	5	1	7	1
Minn.	4,776	190	—	—	—	—	1
Iowa	2,869	87	1	NN	—	6	—
Mo.	5,468	531	—	2	—	1	—
N. Dak.	634	7	—	1	1	—	NN
S. Dak.	733	16	—	1	—	—	—
Nebr.	1,666	67	—	1	—	—	—
Kans.	2,654	171	—	—	—	—	—
S. Atlantic	49,561	12,460	4	19	—	3	62
Del.	754	196	—	—	—	—	—
Md.	5,172	1,525	—	3	—	—	—
D.C.	519	838	—	—	—	—	—
Va.	6,873	943	—	3	—	—	3
W. Va.	1,807	60	—	—	—	—	—
N.C.	7,651	794	—	2	—	—	7
S.C.	3,986	959	—	—	—	NN	48
Ga.	7,798	1,678	—	2	—	—	—
Fla.	15,111	5,468	4	—	—	3	3
E.S. Central	16,584	1,933	2	5	—	2	1
Ky.	3,961	277	—	3	—	—	—
Tenn.	5,484	759	2	2	—	—	—
Ala.	4,370	476	—	—	—	2	1
Miss.	2,769	421	—	—	—	—	—
W.S. Central	30,325	4,377	—	6	—	25	25
Ark.	2,551	194	—	—	—	2	—
La.	4,372	854	—	1	—	—	9
Okla.	3,358	148	—	1	—	—	—
Tex.	20,044	3,181	—	4	—	23	16
Mountain	17,128	1,742	—	10	1	6	1
Mont.	883	13	—	1	—	—	—
Idaho	1,252	25	—	1	—	—	—
Wyo.	480	15	—	—	—	—	1
Colo.	4,056	319	—	2	1	4	—
N. Mex.	1,740	93	—	1	—	1	—
Ariz.	4,778	880	—	—	—	1	—
Utah	2,130	155	—	4	—	—	—
Nev.	1,809	242	—	1	—	—	—
Pacific	44,022	6,145	14	29	36	20	8
Wash.	5,756	300	7	—	—	—	—
Oreg.	3,316	225	—	3	1	—	1
Calif.	33,145	5,445	4	26	35	18	7
Alaska	620	15	—	—	—	—	—
Hawaii	1,185	100	—	—	—	2	NN
Guam	149	10	—	—	—	—	—
P.R.	3,890	1,247	—	—	—	—	1
V.I.	118	39	NN	NN	NA	NN	—
American Samoa	62	—	NA	NA	NA	NA	NA
C.N.M.I.	67	—	NA	NA	NA	NA	NA

* No cases of anthrax were reported in 1999.

† Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), through December 31, 1999.

‡ Includes cases reported as wound or unspecified botulism.

§ Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of August 8, 2000.

** Total includes 104 cases among persons with unknown state of residence.

TABLE 2 (Continued) Reported cases of notifiable diseases, by geographic division and area, United States, 1999

Area	Chlamydia*	Cholera	Cryptosporidiosis	Cyclosporiasis	Diphtheria	Ehrlichiosis	
						Human granulocytic	Human monocytic
United States	656,721	6	2,361	56	1	203	90
New England	21,224	—	186	7	—	90	—
Maine	1,220	—	31	—	—	—	—
N.H.	976	—	20	—	—	1	—
Vt.	485	—	36	NN	—	NN	NN
Mass.	8,776	—	71	7	—	9	—
R.I.	2,345	—	6	—	—	7	—
Conn.	7,422	—	22	—	—	73	—
Mid. Atlantic	66,209	1	629	18	—	87	—
Upstate N.Y.	NN	—	192	—	—	75	—
N.Y. City	26,766	—	200	18	—	2	—
N.J.	12,424	1	54	—	—	—	—
Pa.	27,019	—	123	—	—	10	—
E.N. Central	111,571	—	256	1	—	—	—
Ohio	29,393	—	67	1	—	—	—
Ind.	11,734	—	47	NN	—	NN	NN
Ill.	32,870	—	90	—	—	NN	NN
Mich.	23,107	—	52	—	—	—	—
Wis.	14,462	—	NN	NN	—	NN	NN
W.N. Central	38,516	—	217	—	—	4	53
Minn.	7,450	—	91	—	—	—	—
Iowa	5,511	—	96	—	—	—	—
Mo.	13,365	—	26	—	—	3	53
N. Dak.	947	—	20	—	—	—	—
S. Dak.	1,544	—	7	—	—	—	—
Nebr.	3,616	—	15	—	—	1	—
Kans.	6,093	—	2	—	—	1	—
S. Atlantic	134,306	1	462	28	—	—	21
Del.	2,761	—	1	—	—	—	—
Md.	13,568	—	17	NN	—	NN	NN
D.C.	NN	—	7	5	—	NN	NN
Va.	13,735	—	30	—	—	—	—
W. Va.	1,820	—	3	3	—	—	—
N.C.	21,812	—	35	—	—	—	12
S.C.	18,499	—	—	—	—	—	—
Ga.	30,368	1	170	10	—	—	1
Fla.	31,743	—	189	10	—	—	8
E.S. Central	45,514	—	48	—	—	21	—
Ky.	7,378	—	7	—	—	—	—
Tenn.	14,216	—	13	—	—	21	—
Ala.	12,375	—	16	—	—	NN	NN
Miss.	11,545	—	12	—	—	NN	NN
W.S. Central	93,653	—	96	—	—	—	23
Ark.	5,865	—	2	—	—	—	22
La.	16,635	—	24	—	—	NN	NN
Okla.	8,195	—	NN	NN	—	NN	NN
Tex.	62,958	—	60	—	—	—	1
Mountain	37,430	2	101	2	—	—	1
Mont.	1,564	—	13	—	—	NN	NN
Idaho	1,778	—	NN	NN	—	NN	NN
Wyo.	787	—	1	—	—	—	—
Colo.	10,848	—	14	2	—	—	—
N. Mex.	5,017	—	44	—	—	NN	NN
Ariz.	12,111	2	16	—	—	—	—
Utah	2,219	—	4	—	—	—	1
Nev.	3,026	—	9	—	—	NN	NN
Pacific	108,298	2	377	—	1	1	1
Wash.	11,954	—	NN	—	1	NN	NN
Oreg.	6,127	—	98	—	—	NN	NN
Calif.	85,156	1	279	—	—	1	1
Alaska	1,886	—	—	—	—	NN	NN
Hawaii	3,165	1	—	—	—	NN	NN
Guam	497	—	—	—	—	—	—
P.R.	1,445	—	—	—	—	—	—
V.I.	136	NA	NA	NA	NA	NA	NA
American Samoa	NA	NA	NA	NA	NA	NA	NA
C.N.M.I.	NA	NA	NA	NA	NA	NA	NA

* Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of August 6, 2000.

TABLE 2. (Continued) Reported cases of notifiable diseases, by geographic division and area, United States, 1999

Area	Encephalitis				Escherichia coli O157:H7		Gonorrhea ^a
	California serogroup viral	Eastern equine	St. Louis	Western equine	NETSS [*]	PHLIS [†]	
United States	70	5	4	1	4,513	2,809	360,076
New England	—	—	—	—	404	366	6,625
Maine	—	—	—	—	40	NA	83
N.H.	—	—	—	—	36	34	115
Vt.	—	—	—	—	32	21	52
Mass.	—	—	—	—	177	188	2,453
R.I.	—	—	—	—	27	26	601
Conn.	—	—	—	—	92	97	3,321
Mid. Atlantic	—	—	—	—	1,034	239	40,973
Upstate N.Y.	—	—	—	—	939	18	7,616
N.Y. City	—	—	—	—	17	18	12,210
N.J.	—	—	—	—	76	144	7,852
Pa.	—	—	—	—	NN	59	13,295
E.N. Central	31	—	—	—	994	532	70,056
Ohio	14	—	—	—	262	219	18,141
Ind.	—	—	—	—	107	67	6,092
Ill.	3	—	—	—	498	92	23,254
Mich.	1	—	—	—	127	85	15,907
Wis.	13	—	—	—	NN	89	6,662
W.N. Central	6	—	—	1	595	550	16,793
Minn.	6	—	—	1	175	187	2,630
Iowa	—	—	—	—	114	82	1,365
Mo.	—	—	—	—	47	71	8,187
N. Dak.	—	—	—	—	19	19	83
S. Dak.	—	—	—	—	47	62	192
Nebr.	—	—	—	—	159	113	1,471
Kans.	—	—	—	—	34	16	2,665
S. Atlantic	26	3	4	—	397	190	104,262
Del.	—	—	—	—	6	3	1,662
Md.	—	NN	—	—	43	4	10,430
D.C.	—	—	—	—	1	NA	3,536
Va.	—	—	—	—	79	63	9,402
W. Va.	16	—	—	—	16	11	584
N.C.	10	—	—	—	74	53	19,428
S.C.	—	—	—	—	22	14	15,037
Ge.	—	—	—	—	43	3	21,244
Fla.	—	3	4	—	73	39	22,939
E.S. Central	7	—	—	—	142	106	36,014
Ky.	1	—	—	—	50	35	3,349
Tenn.	6	—	—	—	55	46	11,366
Ala.	—	—	—	—	26	21	10,888
Miss.	—	—	—	—	9	5	10,411
W.S. Central	—	2	—	—	174	174	53,346
Ark.	—	—	—	—	15	14	3,226
La.	—	2	—	—	14	15	13,189
Okl.	—	—	—	—	40	30	4,021
Tex.	—	—	—	—	105	115	32,910
Mountain	—	—	—	—	346	245	9,535
Mont.	—	—	—	—	25	NA	53
Idaho	—	—	—	—	76	43	89
Wyo.	—	—	—	—	17	17	43
Colo.	—	—	—	—	115	89	2,526
N. Mex.	—	—	—	—	13	7	974
Ariz.	—	—	—	—	37	24	4,293
Utah	—	—	—	—	36	50	254
Nev.	—	—	—	—	25	15	1,303
Pacific	—	—	—	—	467	407	22,472
Wash.	NN	NN	NN	NN	186	185	2,132
Oreg.	NN	NN	NN	NN	68	69	903
Calif.	—	—	—	—	197	140	18,672
Alaska	NN	NN	NN	NN	1	1	302
Hawaii	—	—	—	NN	15	12	463
Guam	—	—	—	—	NN	NA	59
P.R.	—	—	—	—	9	NA	321
V.I.	NA	NA	NA	NA	NA	NA	51
American Samoa	NA	NA	NA	NA	NN	NA	NA
C.N.M.I.	NA	NA	NA	NA	NN	NA	NA

^{*} National Electronic Telecommunications System for Surveillance.

[†] Public Health Laboratory Information System. Totals reported to the National Center for Infectious Diseases as of July 18, 2000.

[‡] Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of August 8, 2000.

TABLE 2. (Continued) Reported cases of notifiable diseases, by geographic division and area, United States, 1999

Area	Haemophilus influenzae, invasive disease	Hansen disease (leprosy)	Hantavirus pulmonary syndrome*	Hemolytic uremic syndrome, postdiarrheal	Hepatitis			Legionellosis
					A	B	C; non-A, non-B	
United States	1,309	108	33	181	17,047	7,694	3,111	1,108
New England	117	1	—	12	373	153	16	91
Maine	8	—	—	—	27	3	2	3
N.H.	19	—	—	—	18	17	NN	7
Vt.	6	NN	—	—	24	5	—	15
Mass.	41	—	—	1	142	44	4	27
R.I.	9	—	—	—	35	43	3	20
Conn.	34	—	—	10	127	41	—	16
Mid. Atlantic	210	12	2	36	1,211	922	136	273
Upstate N.Y.	86	—	—	25	293	200	69	74
N.Y. City	57	9	—	7	403	293	—	44
N.J.	59	2	—	6	151	138	—	24
Pa.	8	1	2	—	364	291	66	131
E.N. Central	212	2	—	12	2,940	913	893	279
Ohio	63	2	—	12	655	95	4	85
Ind.	32	NN	1	NN	105	77	3	52
Ill.	89	—	NN	NN	849	202	46	33
Mich.	20	—	—	—	1,253	509	822	64
Wis.	8	—	—	NN	76	30	—	16
W.N. Central	92	1	4	22	1,133	393	344	71
Minn.	57	—	—	13	128	80	25	18
Iowa	2	—	—	—	161	44	—	17
Mo.	14	—	2	—	712	227	315	22
N. Dak.	2	NN	—	6	3	2	1	2
S. Dak.	4	—	—	4	10	1	—	6
Nebr.	5	—	NN	NN	53	22	3	—
Kans.	8	1	2	—	66	17	—	—
S. Atlantic	289	4	—	25	2,151	1,412	184	165
Del.	1	—	—	—	2	1	—	21
Md.	71	1	NN	NN	306	148	22	37
D.C.	5	—	—	—	59	25	1	5
Va.	24	—	NN	—	185	106	11	41
W. Va.	8	—	—	3	47	29	21	NN
N.C.	36	—	NN	10	167	224	33	15
S.C.	6	—	—	—	46	64	22	12
Ge.	80	NN	—	4	482	230	4	5
Fla.	58	3	—	8	855	585	70	29
E.S. Central	72	—	—	10	404	473	348	53
Ky.	9	—	—	NN	67	50	26	22
Tenn.	40	—	—	8	147	207	123	24
Ala.	18	—	NN	2	62	86	1	5
Miss.	5	—	NN	—	128	130	196	2
W.S. Central	66	24	1	19	3,343	1,319	713	41
Ark.	2	—	—	—	81	98	31	1
La.	15	3	—	—	213	172	302	11
Okla.	47	1	—	1	533	185	18	7
Tex.	4	20	1	16	2,516	864	362	22
Mountain	117	3	14	9	1,258	614	237	49
Mont.	3	—	2	—	18	21	5	—
Idaho	2	—	2	2	47	29	8	3
Wyo.	1	—	1	1	9	14	88	—
Colo.	15	1	2	2	219	99	37	14
N. Mex.	19	—	4	1	56	215	34	1
Ariz.	63	—	2	NN	700	138	49	7
Utah	10	—	1	1	64	39	6	10
Nev.	4	2	—	—	146	59	10	6
Pacific	132	61	11	32	4,234	1,495	240	86
Wash.	9	1	5	NN	505	111	24	22
Oreg.	45	2	NN	4	251	116	23	NN
Calif.	54	35	6	29	3,439	1,234	193	62
Alaska	9	1	—	—	15	18	—	1
Hawaii	15	22	—	—	24	16	—	—
Guam	—	1	—	—	1	4	2	—
P.R.	—	5	—	—	417	307	—	—
V.I.	NA	NA	—	—	NA	NA	NA	NA
American Samoa	NA	NA	—	NA	NA	NA	NA	NA
C.N.M.I.	NA	NA	—	NA	NA	NA	NA	NA

* Totals reported to the National Center for Infectious Diseases as of June 30, 2000.

TABLE 2. (Continued) Reported cases of notifiable diseases, by geographic division and area, United States, 1999

Area	Lyme disease	Malaria	Measles		Meningo-coccal disease	Mumps	Pertussis	Plague
			Indigenous	Imported*				
United States	16,273	1,666	66	34	2,501	387	7,288	9
New England	4,642	70	5	6	115	9	978	—
Maine	41	3	—	—	5	—	33	—
N.H.	27	2	—	1	13	2	116	—
Vt.	26	5	—	—	5	1	96	—
Mass.	787	22	4	4	66	4	649	—
R.I.	546	8	—	—	9	2	49	—
Conn.	3,215	30	1	1	17	—	35	—
Mid. Atlantic	8,902	431	—	5	237	46	1,319	—
Upstate N.Y.	4,266	78	—	2	80	14	1,020	—
N.Y. City	136	251	—	3	57	12	61	—
N.J.	1,719	57	—	—	52	1	19	—
Pa.	2,781	45	—	—	48	19	219	—
E. N. Central	586	169	5	5	423	56	743	—
Ohio	47	18	—	—	134	21	322	—
Ind.	21	22	1	1	76	5	90	—
Ill.	17	77	—	2	111	16	140	—
Mich.	11	42	4	2	64	10	74	—
Wis.	490	10	—	—	38	4	117	—
W. N. Central	407	104	—	1	243	16	571	—
Minn.	283	71	—	1	56	1	281	—
Iowa	24	13	—	—	42	8	111	—
Mo.	72	14	—	—	94	1	75	—
N. Dak.	1	—	—	—	4	1	31	—
S. Dak.	—	—	—	—	11	8	—	—
Nebr.	11	1	—	—	13	1	9	—
Kans.	16	5	—	—	23	4	56	—
S. Atlantic	1,353	395	15	5	446	55	500	—
Del.	167	2	—	—	10	—	8	—
Md.	899	110	—	—	55	6	124	—
D.C.	6	19	—	—	4	2	1	—
Va.	122	76	15	3	60	11	65	—
W. Va.	20	4	—	—	9	—	6	—
N.C.	74	36	—	—	49	9	104	—
S.C.	6	19	—	—	48	6	27	—
Ga.	—	32	—	—	72	4	52	—
Fla.	99	97	—	2	139	17	113	—
E. S. Central	102	27	2	—	161	12	118	—
Ky.	19	7	2	—	35	—	49	—
Tenn.	59	9	—	—	65	—	45	—
Ala.	20	7	—	—	38	11	21	NN
Miss.	4	4	—	—	23	1	3	—
W. S. Central	96	128	8	4	260	50	230	—
Ark.	7	3	5	—	35	—	26	—
La.	9	10	—	—	70	11	9	—
Okla.	8	2	—	—	40	4	43	—
Tex.	72	113	3	4	115	35	152	—
Mountain	17	45	2	—	149	27	829	9
Mont.	—	4	—	—	5	—	2	—
Idaho	3	3	—	—	14	4	146	—
Wyo.	3	1	—	—	5	—	2	—
Colo.	3	18	—	—	39	6	313	3
N. Mex.	1	4	—	—	16	NN	155	6
Ariz.	3	7	1	—	45	8	139	—
Utah	2	4	—	—	17	4	58	—
Nev.	2	5	1	—	8	5	14	—
Pacific	168	296	29	8	467	116	2,000	—
Wash.	14	43	4	1	93	2	739	—
Oreg.	15	22	12	—	76	NN	61	—
Calif.	139	218	13	4	280	95	1,144	—
Alaska	—	1	—	—	8	3	5	—
Hawaii	NN	12	—	3	10	16	51	—
Guam	—	1	1	—	1	3	2	—
P.R.	—	3	1	—	15	1	14	—
V.I.	NA	NA	NA	NA	NA	NA	NA	NA
American Samoa	NA	NA	NA	NA	NA	NA	NA	NA
C.N.M.I.	NA	NA	NA	NA	NA	NA	NA	NA

* Imported cases include only those resulting from importation from other countries.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area, United States, 1999

Area	Pertussis	Rabies, Animal	RMSF [†]	Rubella		Salmonellosis	
				Rubella	Congenital syndrome	NETSS [‡]	PHLIS [§]
United States	18	6,730	579	267	9	40,596	32,782
New England	—	919	6	7	—	2,237	2,250
Maine	—	200	—	—	—	132	104
N.H.	—	47	—	—	—	141	137
Vt.	—	92	—	—	NN	93	82
Mass.	—	226	2	7	—	1,208	1,229
R.I.	—	101	4	—	—	151	189
Conn.	NN	253	—	—	—	512	529
Mid. Atlantic	4	1,306	39	35	2	5,634	5,280
Upstate N.Y.	1	919	14	21	—	1,516	1,363
N.Y. City	1	NA	—	6	2	1,457	1,527
N.J.	1	180	7	5	—	1,199	1,119
Pa.	1	206	19	3	—	1,462	1,271
E.N. Central	2	172	32	2	—	5,432	4,890
Ohio	1	36	8	—	—	1,313	1,093
Ind.	1	13	12	1	—	572	479
Ill.	—	10	7	1	—	1,000	1,568
Mich.	—	92	5	—	—	973	968
Wis.	—	21	—	—	—	974	562
W.N. Central	—	746	33	149	—	2,349	2,410
Minn.	—	120	1	5	—	626	710
Iowa	—	159	1	30	—	260	232
Mo.	—	31	10	2	—	758	881
N. Dak.	—	147	—	—	—	58	62
S. Dak.	—	180	4	—	—	100	118
Nebr.	—	4	9	103	—	214	180
Kans.	—	105	2	—	—	333	227
S. Atlantic	3	2,172	279	39	—	9,742	6,499
Del.	—	58	—	—	—	179	150
Md.	1	384	33	1	—	860	886
D.C.	—	—	—	—	—	76	NA
Va.	—	581	20	—	—	1,286	1,036
W. Va.	—	115	1	—	—	189	154
N.C.	1	442	152	37	—	1,331	1,311
S.C.	—	149	52	—	—	702	530
Ga.	—	247	14	—	—	1,576	1,701
Fla.	1	195	7	1	—	3,143	709
E.S. Central	1	256	99	2	—	2,239	1,481
Ky.	—	35	3	—	—	419	294
Tenn.	—	95	66	—	—	593	597
Ala.	1	124	17	2	—	605	491
Miss.	—	2	14	—	—	622	99
W.S. Central	—	524	66	22	—	4,068	2,807
Ark.	—	31	25	12	—	698	265
La.	—	—	2	—	—	726	617
Okla.	NN	94	29	1	—	466	352
Tex.	NN	399	10	9	—	2,198	1,573
Mountain	3	272	19	16	5	3,071	2,615
Mont.	—	64	2	—	—	96	2
Idaho	—	6	—	—	—	135	97
Wyo.	1	46	5	—	—	70	59
Colo.	2	51	4	1	1	720	708
N. Mex.	—	9	1	—	1	370	293
Ariz.	—	81	1	13	2	924	820
Utah	—	8	5	1	1	566	587
Nev.	—	8	1	—	—	200	49
Pacific	3	364	6	4	2	5,804	4,760
Wash.	—	—	3	—	—	792	848
Oreg.	—	4	2	—	—	426	477
Calif.	3	351	1	4	2	4,193	3,111
Alaska	—	9	NN	—	NN	55	35
Hawaii	—	—	NN	—	—	338	289
Guam	—	—	—	—	—	37	NA
P.R.	—	74	—	2	—	715	NA
V.I.	NA	NA	NA	NA	NA	NA	NA
American Samoa	NA	NA	NA	NA	NA	NA	NA
C.N.M.I.	NA	NA	NA	NA	NA	NA	NA

* No cases of paralytic poliomyelitis or human rabies were reported in 1999.

† Rocky Mountain spotted fever.

‡ National Electronic Telecommunications System for Surveillance.

§ Public Health Laboratory Information System. Totals reported to the National Center for Infectious Diseases as of May 4, 2000.

TABLE 2. (Continued) Reported cases of notifiable diseases, by geographic division and area, United States, 1999

Area	Shigellosis		Streptococcal disease, invasive, group A	Streptococcus pneumoniae, drug resistant	Streptococcal toxic-shock syndrome	Syphilis ¹	
	NETSS ^a	PHLIS ^b				Congenital (age <1 yr)	Primary & secondary
United States	17,521	10,084	2,382	4,618	61	556	6,657
New England	885	851	81	14	1	2	60
Maine	5	—	9	—	—	—	—
N.H.	19	17	17	NN	—	1	1
Vt.	7	4	14	14	1	—	3
Mass.	748	731	26	NN	—	—	37
R.I.	37	29	15	—	—	—	3
Conn.	69	70	—	—	NN	1	16
Mid. Atlantic	1,188	750	410	152	4	96	302
Upstate N.Y.	314	84	245	150	NN	2	20
N.Y. City	353	247	118	NA	—	41	130
N.J.	297	236	29	—	3	46	68
Pa.	224	183	18	2	1	7	84
E.N. Central	3,300	1,853	638	197	43	93	1,254
Ohio	422	150	149	—	14	6	92
Ind.	368	118	37	197	2	7	450
Ill.	1,330	1,018	248	NN	27	53	422
Mich.	535	489	206	NN	—	20	249
Wis.	645	78	NN	NN	NN	7	41
W.N. Central	1,246	806	252	626	3	10	135
Minn.	254	254	182	609	—	—	10
Iowa	74	62	—	NN	—	—	9
Mo.	721	353	46	—	—	9	96
N. Dak.	3	2	8	5	—	—	—
S. Dak.	18	10	11	3	—	1	—
Nebr.	67	68	—	—	—	—	6
Kans.	89	57	6	9	3	—	14
S. Atlantic	2,762	534	334	1,700	4	115	2,102
Del.	15	11	—	10	—	—	10
Md.	162	58	NN	NN	NN	27	343
D.C.	53	NA	11	46	NN	—	46
Va.	136	66	36	NN	—	3	153
W. Va.	9	5	27	31	—	—	5
N.C.	211	83	48	NN	—	19	464
S.C.	122	64	5	356	—	19	269
Ga.	284	83	112	555	—	15	430
Fla.	1,710	154	96	711	4	32	383
E.S. Central	1,223	699	85	318	5	25	1,138
Ky.	235	149	26	—	—	—	101
Tenn.	691	476	59	318	5	7	641
Ala.	117	63	—	—	—	6	202
Miss.	180	11	NN	NN	NN	12	194
W.S. Central	3,143	1,212	243	1,559	—	102	1,053
Ark.	76	27	8	30	—	—	14
La.	228	137	1	116	NN	12	306
Okla.	560	171	NN	NN	NN	8	197
Tex.	2,281	877	234	1,412	—	68	473
Mountain	1,164	773	311	44	1	25	241
Mont.	10	—	—	—	NN	—	1
Idaho	28	12	7	NN	—	—	—
Wyo.	3	1	2	8	—	—	—
Colo.	205	164	—	6	—	1	8
N. Mex.	152	109	41	20	—	—	12
Ariz.	602	413	260	—	—	24	212
Utah	66	68	NN	NN	1	—	2
Nev.	98	6	1	10	—	—	5
Pacific	2,670	2,606	28	1	—	88	372
Wash.	172	116	NN	NN	—	—	77
Oreg.	95	91	NN	NN	NN	—	8
Calif.	2,364	2,358	NN	—	NN	88	283
Alaska	4	5	—	—	—	—	1
Hawaii	35	36	28	1	—	—	3
Guam	19	NA	3	—	—	—	2
P.R.	141	NA	—	—	—	17	146
V.I.	NA	NA	NA	NA	NN	—	1
American Samoa	NA	NA	NA	NA	NA	NA	NA
C.N.M.I.	NA	NA	NA	NA	NA	NA	NA

^a National Electronic Telecommunications System for Surveillance.^b Public Health Laboratory Information System. Totals reported to the National Center for Infectious Diseases as of April 17, 2000.^c Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of August 8, 2000.

TABLE 2. (Continued) Reported cases of notifiable diseases, by geographic division and area, United States, 1999

Area	Syphilis* All stages	Tetanus	Toxic-shock syndrome	Trichinosis	Tuberculosis ¹	Typhoid fever	Varicella ¹ (chickenpox)	Yellow fever
United States	35,628	40	113	12	17,531	346	46,016	1
New England	587	—	7	1	489	28	497	—
Maine	1	—	2	—	23	—	45	—
N.H.	17	—	2	—	19	—	NN	NN
Vt.	3	—	—	—	3	1	NN	—
Mass.	385	—	3	—	270	17	427	—
R.I.	56	—	—	—	53	3	25	—
Conn.	126	—	NN	1	121	7	NN	—
Mid. Atlantic	5,826	5	13	3	2,862	100	—	—
Upstate N.Y.	357	4	6	3	377	15	NN	—
N.Y. City	3,737	—	—	—	1,460	49	NN	—
N.J.	900	—	—	—	571	35	NN	—
Pa.	932	1	5	—	454	1	NN	—
E.N. Central	4,101	4	35	3	1,753	41	28,004	—
Ohio	364	2	4	—	317	4	1,307	—
Ind.	802	2	2	—	150	6	NN	—
Ill.	1,967	—	5	2	825	17	13,846	—
Mich.	778	—	17	—	351	14	12,260	—
Wis.	190	—	7	1	110	—	591	—
W.N. Central	625	3	13	1	582	3	5,297	—
Minn.	71	1	2	—	201	1	NN	—
Iowa	37	—	4	—	58	1	NN	—
Mo.	395	1	3	—	208	—	5,291	—
N. Dak.	—	—	—	—	7	—	5	—
S. Dak.	3	—	—	—	21	—	NN	—
Nebr.	24	—	2	1	18	1	1	—
Kans.	95	1	2	—	69	—	NN	—
S. Atlantic	10,220	5	8	1	3,518	57	3,566	—
Del.	72	—	—	—	34	2	5	—
Md.	1,385	—	NN	—	294	9	NN	NN
D.C.	458	—	—	—	70	—	75	—
Va.	722	—	—	—	334	11	1,490	—
W. Va.	15	—	—	—	41	—	1,995	—
N.C.	1,713	2	1	—	488	3	NN	—
S.C.	925	—	2	—	315	3	NN	—
Ga.	1,973	—	2	—	665	5	NN	—
Fla.	2,957	3	3	1	1,277	24	NN	—
E.S. Central	3,960	—	7	—	1,120	2	594	—
Ky.	302	—	3	NN	209	1	NN	—
Tenn.	1,734	—	4	—	382	1	584	—
Ala.	1,018	—	—	—	314	—	NN	—
Miss.	906	—	NN	—	215	—	NN	—
W.S. Central	5,024	6	2	—	2,395	24	7,646	—
Ark.	354	—	—	NN	181	1	NN	—
La.	1,423	—	—	—	357	—	173	—
Okla.	538	—	2	NN	206	—	NN	—
Tex.	3,699	6	NN	—	1,649	23	7,473	—
Mountain	1,151	—	4	1	580	7	423	—
Mont.	3	—	—	—	14	—	NN	—
Idaho	13	—	—	—	16	—	NN	—
Wyo.	—	—	1	—	3	—	NN	—
Colo.	91	—	—	1	88	2	NN	—
N. Mex.	80	—	2	—	64	—	NN	—
Ariz.	833	—	—	—	202	2	245	—
Utah	49	—	1	—	40	2	136	—
Nev.	92	—	—	—	93	1	42	NN
Pacific	3,124	17	24	2	4,232	86	—	1
Wash.	204	—	5	—	258	8	NN	—
Oreg.	37	1	NN	—	123	5	NN	—
Calif.	2,859	16	19	2	3,606	71	NN	1
Alaska	13	—	NN	—	61	—	NN	—
Hawaii	11	—	NN	—	184	—	NN	—
Guam	12	—	—	—	69	—	210	—
P.R.	1,457	2	—	—	200	—	5,019	—
V.I.	13	NA	NA	NA	NA	NA	NA	NA
American Samoa	NA	NA	NA	NA	4	NA	NA	NA
C.N.M.I.	NA	NA	NA	NA	66	NA	NA	NA

* Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of August 8, 2000.

¹ Totals reported to the Division of Tuberculosis Elimination, NCHSTP, as of May 3, 2000.² Although not nationally notifiable, reporting is recommended by the Council for State and Territorial Epidemiologists.

TABLE 3. Reported cases and incidence rates of notifiable diseases,* by age group, United States, 1999

Disease	Total	<1 yrs	1-4 yrs	5-14 yrs	15-24 yrs	25-39 yrs	40-64 yrs	≥65 yrs	Age not stated
	No.	No.	No.	No.	No.	No.	No.	No.	(Rate)
AIDS	45,024	89	231	18	0.34	23,291	19,003	718	2.08
Scabies	2,021	189	189	189	0.00	2	10	0.01	0.01
Infant	16	16	16	16	0.00	16	16	0.00	0.00
Other (includes wound)	16	16	16	16	0.00	16	16	0.00	0.00
Chlamydia	655,335	1,033	1,033	1,033	0.04	138,422	13,035	592	7.00
Cholera	236	NA	NA	NA	NA	1,273	229.24	106	0.01
Cryptosporidiosis	236	142	432	338	0.51	710	492	106	0.33
Cyclosporiasis	61	4	3	3	0.01	6	23	1	0.06
Diphtheria	203	1	0.03	8	0.03	46	77	56	0.21
Human granulocytic	99	1	0.07	3	0.01	18	0.03	22	0.68
Human monocytic	70	2	0.05	46	0.12	1	0.00	2	0.01
Encephalitis, California	3	—	—	—	0.01	1	3	—	—
Eastern equine	3	—	—	—	—	—	—	—	—
St. Louis equine	4	—	—	—	—	—	—	—	—
Escherichia coli O157:H7	4,513	99	2,75	792	2.47	110,660	28,402	394	2.58
Gonorrhea	388,442	149	3,91	105	0.15	110	36	54	1.48
Group A streptococcal disease	1,300	—	—	—	0.01	12	12	3	0.01
Hansen disease (leprosy)	106	—	—	—	—	—	—	—	—
Hantavirus pulmonary	23	—	—	3	0.01	3	0.01	—	—
Hemolytic uremic	181	5	0.18	92	0.13	6	0.01	11	0.06
syndrome, postdiarrheal	17,851	89	2,23	586	9.00	5,246	3,503	17	2.54
Hepatitis A	7,654	33	0.87	30	0.19	3,345	1,859	163	2.48
Hepatitis B	1,111	2	0.08	1	0.01	120	20	14	0.48
Hepatitis C, non-A, non-B	16,773	33	0.87	870	8.05	2,722	4,533	240	1.30
Leishmaniasis	1,665	7	0.18	73	0.50	20	0.03	2	0.14
Malaria	2,501	354	9.29	364	0.52	40	0.37	375	1.09
Measles	2,367	34	0.11	61	0.40	578	674	90	0.23
Mumps	7,269	216	56.87	800	0.00	1	0.00	15	0.01
Pertussis (whooping cough)	18	—	—	—	—	—	—	—	—
Pellagra	18	—	—	—	—	—	—	—	—
Rocky Mountain spotted fever	16	—	—	—	—	—	—	—	—
Syphilis	40,596	513	135.45	6,652	12.59	5,005	6,220	6	0.19
Salmonellosis	17,521	370	44.27	4,619	11.72	2,587	1,522	3,590	0.96
Shigellosis	2,382	102	3.49	142	1.23	339	732	726	2.64
Streptococcal disease,	4,618	715	26.81	1,222	11.66	383	878	1,002	4.39
Streptococcus pneumoniae,	61	—	—	153	0.50	15	23	7	0.03
drug-resistant, invasive	—	—	—	—	—	—	—	—	—
Syphilis, primary and secondary	6,950	NA	NA	NA	NA	15	0.03	—	—
Toxic shock syndrome	40	2	0.06	1	0.00	3,229	538	74	0.21
Tuberculosis	17,531	91	2.57	439	1.11	4,388	6,552	4,000	0.01
Typhoid fever	34	1	0.03	74	0.19	168	0.15	—	0.67

* Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NC-HSTP), through December 31, 1999.
 † Chlamydia rates to be collected on aggregate forms different from those used for reported cases. Thus, the total cases reported on this table will differ slightly from others. Cases among persons aged <15 years are not shown because some might not be caused by sexual transmission. However, these cases are included in the totals. Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP as of April 19, 2000.
 ‡ Totals reported to the Division of Tuberculosis Elimination, NCHSTP as of May 3, 2000.
 § Note: Rates <0.01 after rounding are listed as 0.00.

TABLE 4. Reported cases and incidence rates of notifiable diseases,* by sex, United States, 1999

Disease	Total	Male		Female		Sex not stated
		No.	(Rate)	No.	(Rate)	
AIDS ¹	48,104	34,532	(25.95)	10,572	(7.59)	—
Botulism, foodborne	23	12	(0.01)	11	(0.01)	—
Infant	92	44	(1.15)	46	(1.23)	3
Other (includes wound)	39	26	(0.02)	13	(0.01)	—
Brucellosis	182	96	(0.04)	86	(0.02)	—
Chancroid	14	14	(0.01)	0	(0.00)	—
Chlamydia ²	656,721	NA	(NA)	534,612	(400.99)	2,331
Cholera	6	4	(0.00)	2	(0.00)	—
Cryptosporidiosis	2,361	1,419	(1.13)	930	(0.71)	12
Cyclosporiasis	56	29	(0.02)	27	(0.02)	—
Diphtheria	1	1	(0.00)	—	(0.00)	—
Ehrlichiosis, human granulocytic	203	113	(0.11)	90	(0.08)	—
Encephalitis, unspecified	19	10	(0.01)	9	(0.01)	—
Encephalitis, California serogroup viral	70	48	(0.04)	22	(0.02)	—
Eastern equine	5	3	(0.00)	2	(0.00)	—
St. Louis	4	4	(0.00)	—	(0.00)	—
Western equine	1	1	(0.00)	—	(0.00)	—
Escherichia coli O157:H7	4,513	2,053	(1.66)	2,329	(1.79)	131
Hansen disease (leprosy)	360,076	175,564	(134.92)	179,534	(128.34)	978
Hepatitis A	1,309	614	(0.46)	694	(0.49)	11
Hepatitis B	108	65	(0.05)	21	(0.02)	22
Hepatitis C, non-A, non-B	33	20	(0.02)	13	(0.01)	—
Hemolytic uremic syndrome, postdiarrheal	181	73	(0.07)	106	(0.09)	2
Hepatitis E	17,781	10,262	(3.41)	7,519	(2.78)	167
Hepatitis A	7,694	4,532	(1.41)	3,095	(2.22)	105
Hepatitis C, non-A, non-B	3,111	1,869	(1.42)	1,179	(0.85)	43
Legionellosis	1,108	666	(0.51)	436	(0.32)	6
Lyme disease	16,273	8,511	(6.42)	7,715	(5.56)	47
Malaria	1,666	1,063	(0.80)	570	(0.41)	33
Meningitis, bacterial	1,010	544	(0.44)	464	(0.34)	24
Mumps	2,501	1,223	(0.93)	1,254	(0.90)	8
Musculoskeletal disease	367	191	(0.15)	188	(0.14)	—
Pertussis (whooping cough)	7,288	3,341	(2.51)	3,931	(2.82)	16
Plague	9	4	(0.00)	5	(0.00)	—
Psittacosis	16	5	(0.00)	11	(0.01)	—
Rocky Mountain spotted fever	579	351	(0.15)	269	(0.19)	3
Salmonellosis	267	171	(0.13)	96	(0.07)	3
Salmonellosis	40,596	17,310	(13.01)	16,477	(13.27)	4,809
Shigellosis	17,521	6,793	(5.10)	8,062	(5.80)	2,645
Streptococcal disease, invasive, group A	2,362	1,199	(1.16)	1,097	(1.01)	16
Streptococcus pneumoniae	4,618	2,288	(2.47)	1,995	(2.05)	345
Streptococcal toxic-shock syndrome	61	27	(0.03)	34	(0.03)	—
Syphilis, primary and secondary ³	6,657	3,656	(2.90)	2,796	(2.01)	5
Tetanus	40	29	(0.02)	11	(0.01)	—
Toxic-shock syndrome	113	25	(0.02)	88	(0.07)	—
Trichinosis	12	10	(0.01)	2	(0.00)	—
Typhoid fever ⁴	17,531	10,949	(8.31)	6,582	(4.53)	1
Yellow fever	346	159	(0.12)	180	(0.13)	7
	1	1	(0.00)	—	(0.00)	—

* No cases of anthrax, paralytic poliomyelitis, or human rabies were reported in 1999.

¹ Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for STD, and STI Prevention, National Center for HIV/AIDS Epidemiology and Prevention, NCHS17, as of August 8, 2000.² Chlamydia refers to genital infections caused by *C. trachomatis*.³ Totals reported to the National Center for Infectious Diseases as of June 30, 2000.⁴ Totals reported to the National Center for Infectious Diseases as of May 3, 2000.

Note: Rates <0.01 after rounding are listed as 0.00.

TABLE 5. Reported cases and incidence rates of notifiable diseases,* by race, United States, 1999

Disease	Total	American Indian or Alaska Native	Asian or Pacific Islander	Black	White	Other	Race not stated
	No.	No.	No.	No.	No.	No.	No.
	(Rate)	(Rate)	(Rate)	(Rate)	(Rate)	(Rate)	(Rate)
AIDS [†]	45,104	179	30	21,577	14,805	1	7,853 [‡]
Babesiosis	23	7 (2)	2	—	17	—	—
Bordetella pertussis	52	1	—	—	54	—	—
Botulism	39	—	3	2	17	—	—
Chlamydia	32	—	—	—	0.35	—	—
Coccidioidomycosis	655,326	8,746	8,121	228,126	654,377	1	272,461
Cholera	6	—	—	—	—	—	—
Cryptosporidiosis	2,361	5	31	289	1,312	3	721
Cyclosporiasis	96	—	1	6	85	—	—
Diphtheria	1	—	—	—	0.02	—	—
Ehrlichiosis	—	—	—	—	—	—	—
Human granulocytic	203	3	2	—	134	—	64
Human monocytic	99	—	—	5	66	—	28
Human immunodeficiency virus (HIV) infection	39	—	—	1	34	—	5
Human immunodeficiency virus (HIV) serogroup viral	5	—	—	—	—	—	—
Eastern equine encephalomyelitis	1	—	—	—	—	—	—
St. Louis encephalitis	4	—	—	—	—	—	—
Western equine encephalomyelitis	451	—	—	—	—	—	—
Escherichia coli O157:H7	359,442	1,719	1,657	220,581	2,205	6	2,102
Haemophilus influenzae, invasive disease	309	33	15	179	40,695	1	94,599
Hansen disease (leprosy)	108	—	—	—	0.51	—	312
Hantavirus pulmonary syndrome	33	—	27	9	26	—	46
Hepatitis A	18,747	4	1	8	0.03	—	—
Hepatitis B	7,684	177	279	1,915	9,346	1	5,372
Hepatitis C, non-A, non-B	3,111	83	431	1,540	3,075	58	2,535
Human herpesvirus 8	1,111	4	6	41	0.12	—	2,917
Human immunodeficiency virus (HIV) infection	39	—	—	1	34	—	5
Measles	16,273	23	86	117	745	8	3,452
Malaria	1,566	3	107	192	12,481	36	3,452
Mononucleosis	100	7	15	706	2,033	24	4,423
Meningococcal disease	2,351	7	15	9	62	2	11
Meningitis (bacterial)	3,367	26	36	372	1,547	6	513
Paratuberculosis (whooping cough)	7,268	65	109	397	5,003	37	1,867
Plague	9	2	—	—	—	—	—
Psittacosis	579	9	—	—	7	—	—
Rabies	267	—	3	—	—	—	—
Rocky Mountain spotted fever	267	—	3	—	—	—	—
Rubella	9	—	3	—	—	—	—
Syphilis, primary and secondary**	40	—	—	—	—	—	—
Salmonellosis	40,596	204	561	3,252	19,504	1	16,969
Scarlet fever	1,111	23	143	2,747	1,513	123	7,759
Shigellosis	2,362	56	24	339	1,364	2	567
Streptococcal disease, invasive, group A	4,618	11	24	581	1,736	6	2,260
Streptococcal disease, invasive, group B	—	—	—	—	—	—	—
Streptococcal disease, invasive, group C	—	—	—	—	—	—	—
Streptococcal disease, invasive, group D	—	—	—	—	—	—	—
Streptococcal disease, invasive, group E	—	—	—	—	—	—	—
Streptococcal disease, invasive, group F	—	—	—	—	—	—	—
Streptococcal disease, invasive, group G	—	—	—	—	—	—	—
Streptococcal disease, invasive, group H	—	—	—	—	—	—	—
Streptococcal disease, invasive, group I	—	—	—	—	—	—	—
Streptococcal disease, invasive, group J	—	—	—	—	—	—	—
Streptococcal disease, invasive, group K	—	—	—	—	—	—	—
Streptococcal disease, invasive, group L	—	—	—	—	—	—	—
Streptococcal disease, invasive, group M	—	—	—	—	—	—	—
Streptococcal disease, invasive, group N	—	—	—	—	—	—	—
Streptococcal disease, invasive, group O	—	—	—	—	—	—	—
Streptococcal disease, invasive, group P	—	—	—	—	—	—	—
Streptococcal disease, invasive, group Q	—	—	—	—	—	—	—
Streptococcal disease, invasive, group R	—	—	—	—	—	—	—
Streptococcal disease, invasive, group S	—	—	—	—	—	—	—
Streptococcal disease, invasive, group T	—	—	—	—	—	—	—
Streptococcal disease, invasive, group U	—	—	—	—	—	—	—
Streptococcal disease, invasive, group V	—	—	—	—	—	—	—
Streptococcal disease, invasive, group W	—	—	—	—	—	—	—
Streptococcal disease, invasive, group X	—	—	—	—	—	—	—
Streptococcal disease, invasive, group Y	—	—	—	—	—	—	—
Streptococcal disease, invasive, group Z	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AA	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AB	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AC	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AD	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AE	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AF	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AG	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AH	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AI	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AJ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AK	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AL	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AM	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AN	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AO	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AP	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AQ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AR	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AS	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AT	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AU	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AV	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AW	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AX	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AY	—	—	—	—	—	—	—
Streptococcal disease, invasive, group AZ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BA	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BB	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BC	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BD	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BE	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BF	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BG	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BH	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BI	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BJ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BK	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BL	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BM	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BN	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BO	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BP	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BQ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BR	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BS	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BT	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BU	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BV	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BW	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BX	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BY	—	—	—	—	—	—	—
Streptococcal disease, invasive, group BZ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CA	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CB	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CC	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CD	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CE	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CF	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CG	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CH	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CI	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CJ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CK	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CL	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CM	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CN	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CO	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CP	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CQ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CR	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CS	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CT	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CU	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CV	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CW	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CX	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CY	—	—	—	—	—	—	—
Streptococcal disease, invasive, group CZ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DA	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DB	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DC	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DD	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DE	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DF	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DG	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DH	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DI	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DJ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DK	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DL	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DM	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DN	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DO	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DP	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DQ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DR	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DS	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DT	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DU	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DV	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DW	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DX	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DY	—	—	—	—	—	—	—
Streptococcal disease, invasive, group DZ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EA	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EB	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EC	—	—	—	—	—	—	—
Streptococcal disease, invasive, group ED	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EE	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EF	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EG	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EH	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EI	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EJ	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EK	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EL	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EM	—	—	—	—	—	—	—
Streptococcal disease, invasive, group EN	—	—	—	—			

TABLE 6. Reported cases and incidence rates of notifiable diseases,* by ethnicity, United States, 1999

Disease	Total	Hispanic		Non-Hispanic		Ethnicity not stated
		No.	(Rate)	No.	(Rate)	
AIDS [†]	45,104	7,764	(24.78)	38,682	(15.20)	658
Botulism, foodborne	23	1	(0.00)	18	(0.01)	4
Botulism, infant (includes wound)	32	13	(4.21)	19	(0.02)	30
Breast cancer	39	19	(0.04)	19	(0.01)	1
Buberculosis	82	47	(0.15)	14	(0.01)	21
Chlamydia [‡]	655,335	81,708	(260.74)	365,007	(151.23)	208,620
Cholera	6	—	—	4	(0.00)	2
Cryptosporidiosis	2,361	208	(0.68)	1,154	(0.51)	999
Cytoposporiasis	96	5	(0.02)	29	(0.01)	22
Diphtheria	1	—	—	1	(0.00)	—
Ehrlichiosis	203	3	(0.01)	141	(0.08)	59
Human granulocytic	—	—	—	—	—	—
Human monocytic	99	3	(0.01)	67	(0.04)	29
Encephalitis, California serogroup viral	70	—	—	36	(0.02)	34
Eastern equine	5	—	—	—	—	—
Scarlet fever	1	—	—	4	(0.00)	2
West Nile virus	—	—	—	—	—	—
Escherichia coli O157:H7	4,513	110	(0.36)	1,788	(0.80)	2,615
Gonorrhea [§]	359,442	17,170	(54.79)	261,477	(108.34)	80,795
Haemophilus influenzae, invasive disease	1,309	90	(0.29)	648	(0.27)	571
Hansen disease (leprosy)	108	33	(0.11)	40	(0.02)	35
Hepatitis A	1,371	111	(0.35)	1,111	(0.45)	149
Hepatitis B	1,692	18	(0.06)	1,177	(0.06)	46
Hepatitis C, non-A, non-B	17,047	3,949	(12.60)	7,243	(3.00)	5,855
Hepatitis C, non-A, non-B	7,694	663	(2.21)	4,030	(1.67)	2,971
Legionellosis	3,111	23	(0.07)	111	(0.05)	2,977
Lyme disease	1,108	25	(0.08)	581	(0.25)	482
Measles	16,773	189	(0.60)	7,916	(0.38)	8,668
Malaria	1,692	11	(0.04)	84	(0.03)	5
Meningococcal disease	2,501	227	(0.72)	1,384	(0.57)	890
Mumps	367	75	(0.25)	181	(0.08)	131
Pertussis (whooping cough)	7,288	935	(2.98)	4,768	(1.98)	1,585
Plague	9	—	—	—	—	—
Rabies	18	7	(0.00)	7	(0.00)	4
Rocky Mountain spotted fever	579	7	(0.02)	378	(0.16)	194
Rubella	267	153	(0.58)	53	(0.02)	31
Rubella, congenital syndrome	9	7	(0.02)	—	—	2
Salmonellosis	40,596	2,498	(7.97)	15,884	(6.50)	22,414
Shigellosis	17,521	2,966	(9.57)	6,191	(2.56)	8,322
Syphilis, primary and secondary	1,255	152	(0.50)	1,056	(0.43)	45
Streptococcus pneumoniae, drug-resistant, invasive	4,618	152	(0.57)	1,636	(0.67)	2,830
Streptococcus toxic-shock syndrome	61	1	(0.01)	39	(0.02)	21
Syphilis, primary and secondary	6,650	527	(1.68)	5,862	(2.43)	261
Tetanus	40	14	(0.04)	22	(0.01)	4
Toxic-shock syndrome	113	6	(0.02)	39	(0.03)	48
Tuberculosis ^{††}	16,121	1,161	(3.73)	13,621	(5.64)	1,339
Typhoid fever	17,531	3,675	(12.37)	13,621	(5.64)	36
Yellow fever	346	69	(0.22)	130	(0.05)	147

* No cases of anthrax, paralytic poliomyelitis, or human rabies were reported in 1999.

† Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Control, CDC, Atlanta, Georgia, through the National Electronic Telecommunications System for Surveillance, through December 31, 1999.

‡ Chlamydia refers to genital infections caused by *C. trachomatis*. In addition to data collected through the National Electronic Telecommunications System for Surveillance (NETSS), some data concerning chlamydia were reported to the Division of Sexually Transmitted Diseases Prevention, NCHS, as of August 1, 2000.

§ Some data concerning gonorrhea were reported to the Division of Sexually Transmitted Diseases Prevention, NCHS, as of August 1, 2000.

¶ Total number of cases of invasive pneumococcal disease reported to the Division of Sexually Transmitted Diseases Prevention, NCHS, as of June 30, 2000.

†† Total number of cases of tuberculosis reported to the Division of Tuberculosis Elimination, NCHS, as of May 3, 2000.

Note: Rates <0.01 after rounding are listed as 0.00.

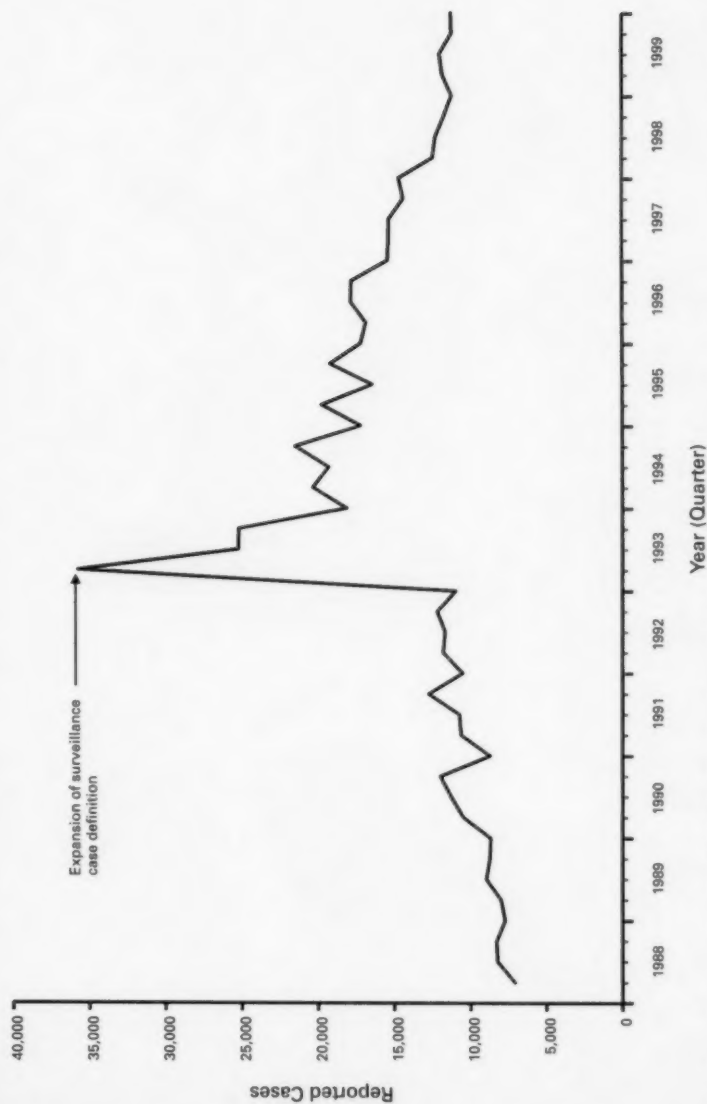
PART 2

Graphs and Maps for Selected Notifiable Diseases in the United States

EXPLANATION OF SYMBOLS USED IN GRAPHS AND MAPS

Data not available	NA
Report of disease is not required in that jurisdiction (not notifiable)	NN
Commonwealth of Northern Mariana Islands	C.N.M.I.
Puerto Rico	P.R.
U.S. Virgin Islands	V.I.

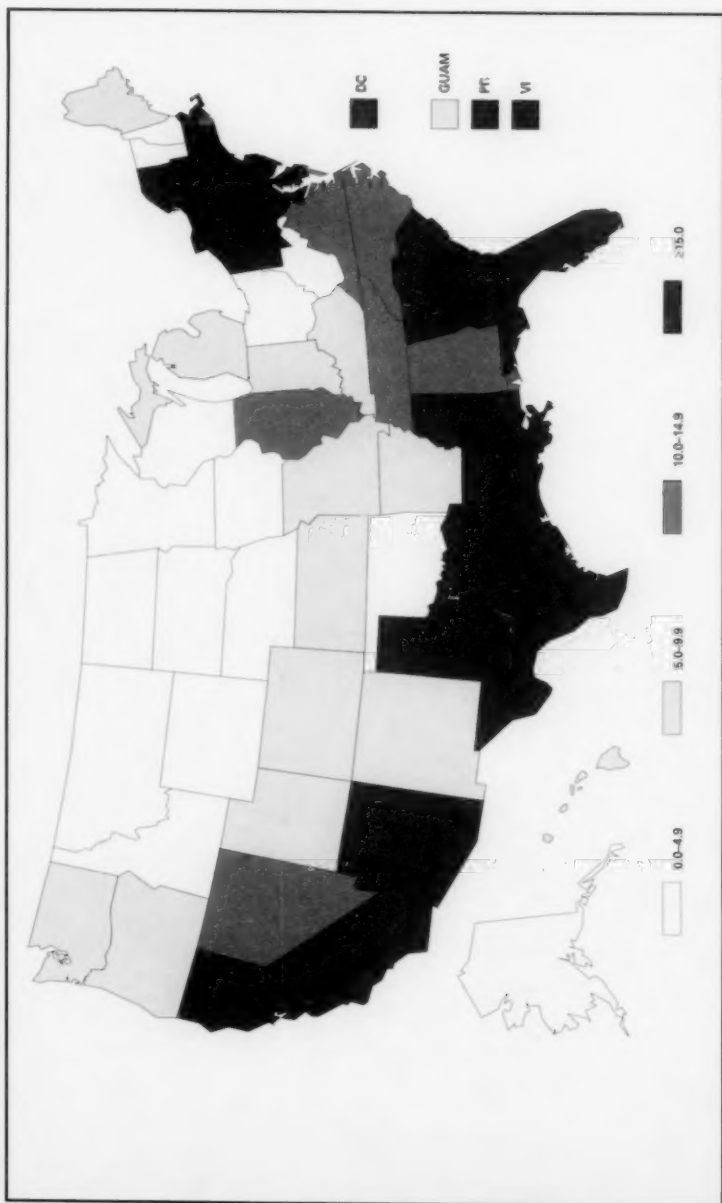
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) — reported cases by quarter, United States,* 1988–1999



*Includes Guam, Puerto Rico, the U.S. Pacific Islands, and the U.S. Virgin Islands.

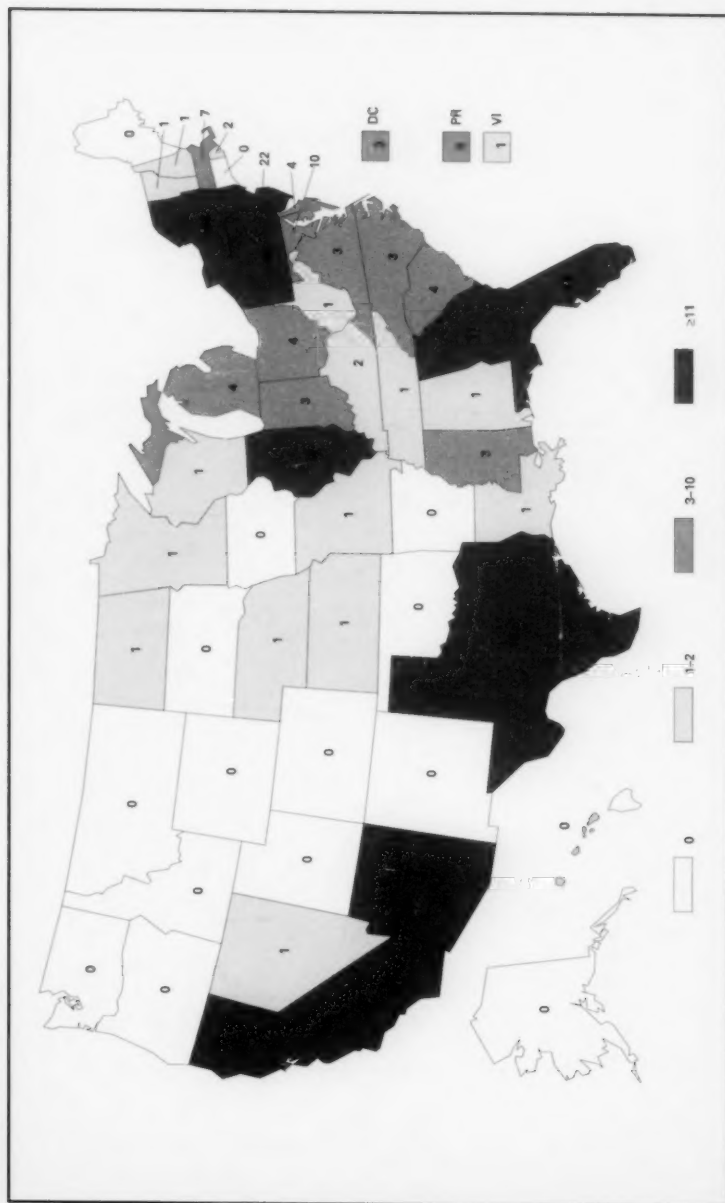
Total number of AIDS cases includes all cases reported to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, as of December 31, 1999. Total includes cases among residents in U.S. territories and 104 cases among persons with unknown state of residence.

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) — reported cases per 100,000 population, United States, Guam, Puerto Rico, and U.S. Virgin Islands, 1999



Total number of AIDS cases includes all cases reported to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, as of December 31, 1999. Total includes cases among residents in U.S. territories and 104 cases among persons with unknown state of residence.

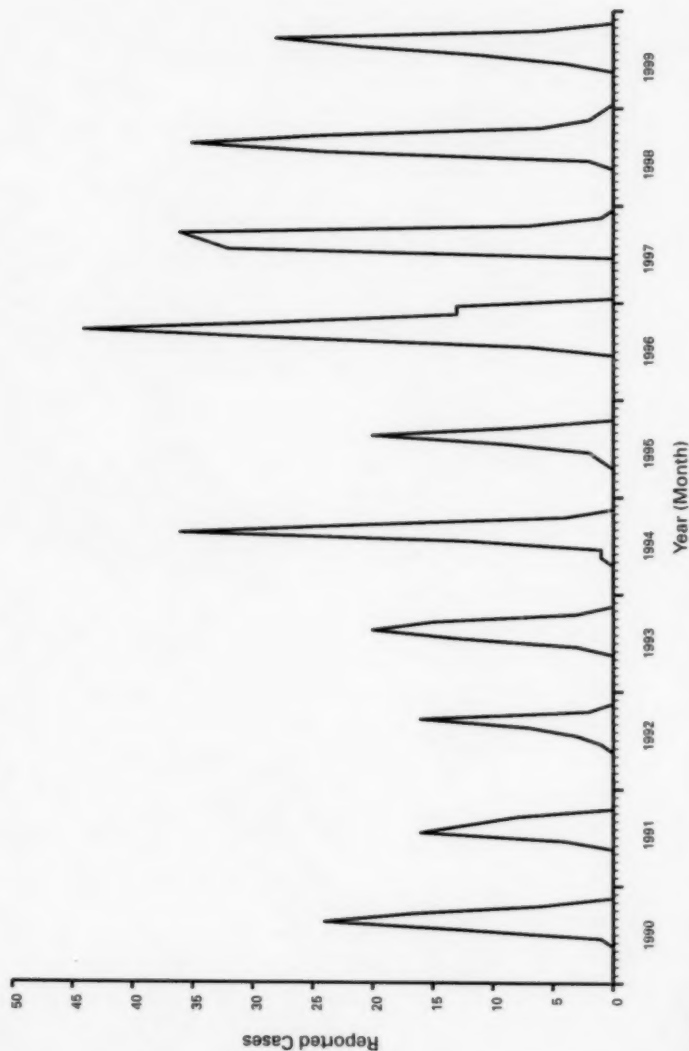
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) — reported pediatric cases,* United States, Puerto Rico, and U.S. Virgin Islands, 1999



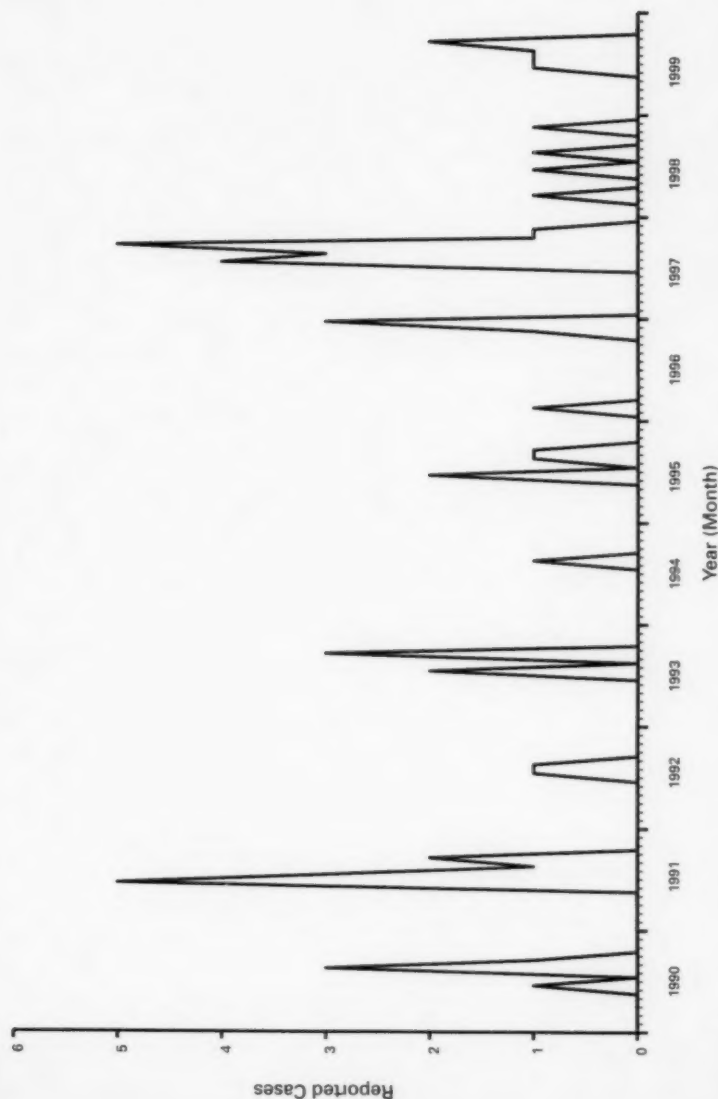
*Children and adolescents aged <13 years.

Trends in AIDS incidence among children continued to decrease with the success of efforts to reduce perinatal (i.e., mother-to-child) human immunodeficiency virus (HIV) transmission. Although the number of perinatally acquired AIDS cases declined 43% during 1992-1996, new cases continue to occur disproportionately among young children from racial/ethnic minority populations.

ARBOVIRAL ENCEPHALITIS — reported cases caused by California serogroup viruses by month of onset, United States, 1990–1999

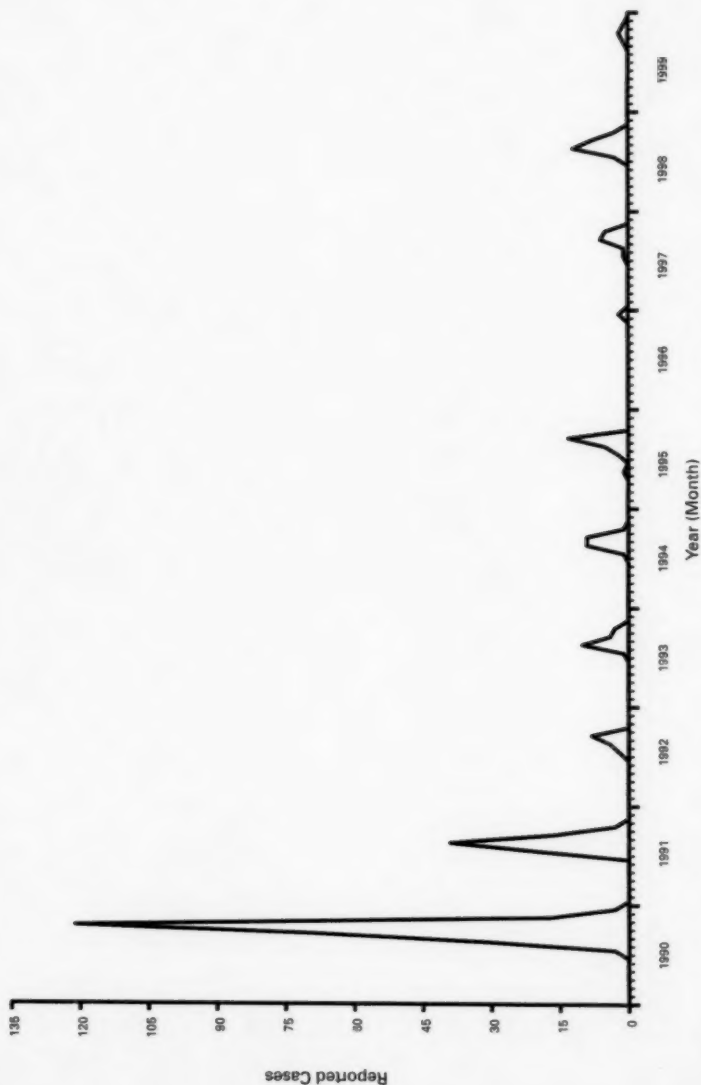


California serogroup viruses (mainly LaCrosse virus in the eastern United States, where the eastern treehole mosquito, *Aedes triseriatus*, is the primary vector) are an endemic cause of encephalitis, especially among children. In 1999, a total of 70 cases was reported from nine states. During 1964–1999, a median of 66 (average: 74) cases was reported each year.

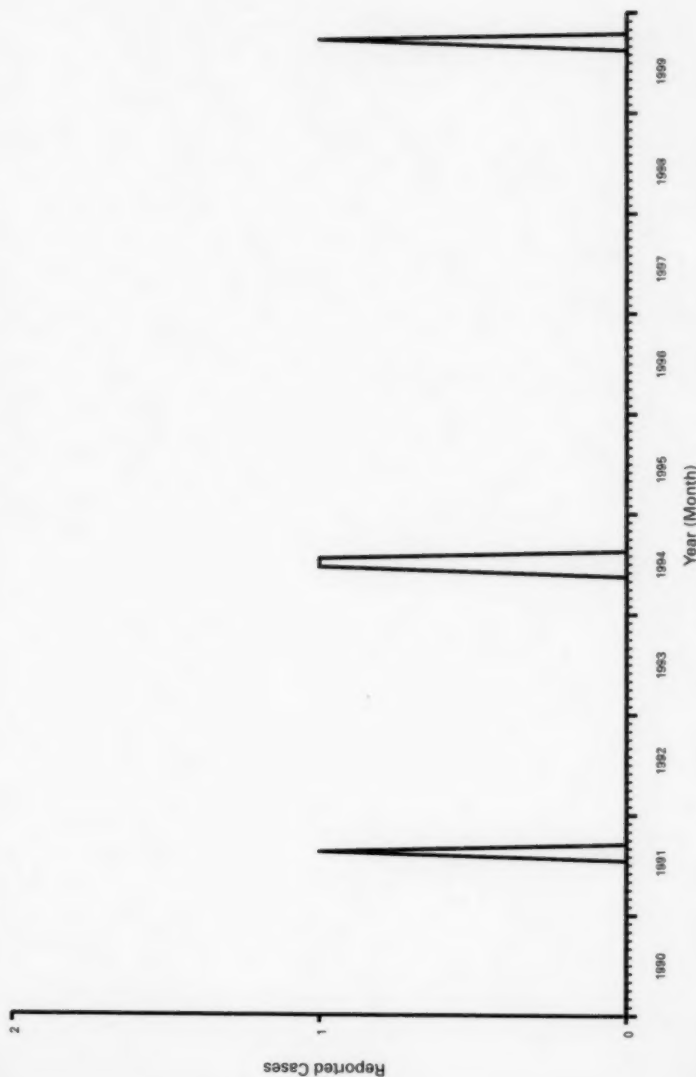
ARBOVIRAL ENCEPHALITIS — reported cases caused by eastern equine encephalitis virus by month of onset, United States, 1990–1999

Cases of eastern equine encephalitis among humans, often associated with high mortality rates (i.e., >20%) and severe neurologic sequelae, occur sporadically in the eastern United States. In 1999, five cases were reported from two states. During 1964–1999, a median of four (average: five) cases was reported each year.

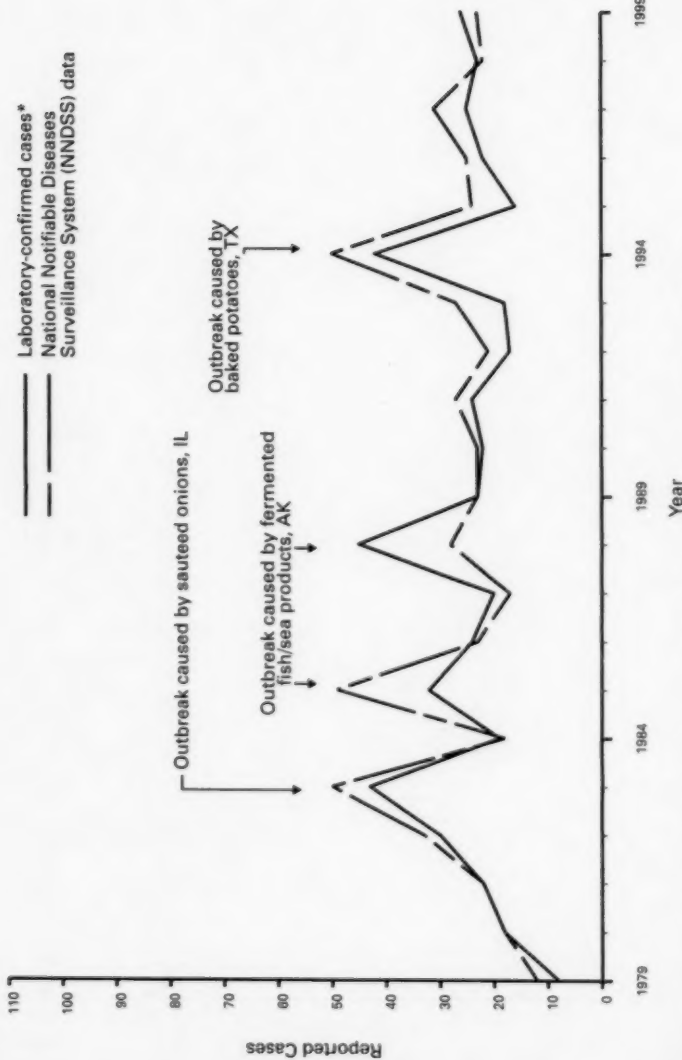
ARBOVIRAL ENCEPHALITIS — reported cases caused by St. Louis encephalitis virus by month of onset, United States, 1990–1999



St. Louis encephalitis virus is the main cause of epidemic viral encephalitis in the United States. In 1999, four cases were reported, all from Florida. During 1964–1999, a median of 26 (average: 124) cases was reported each year.

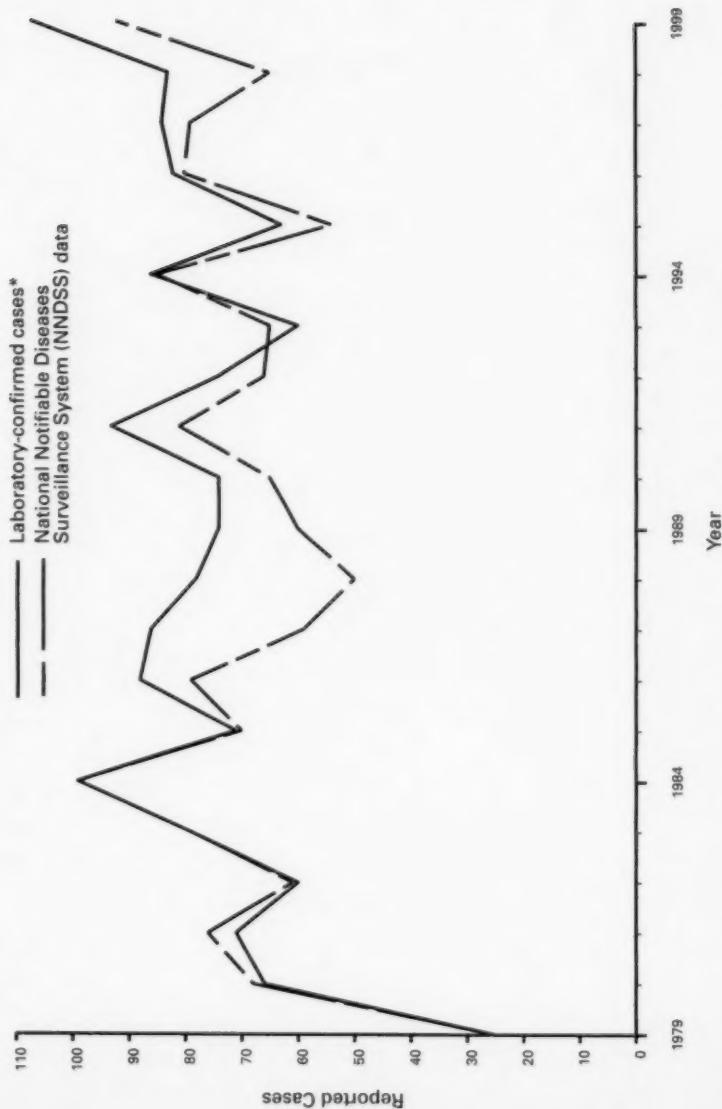
ARBOVIRAL ENCEPHALITIS — reported cases caused by western equine encephalitis virus by month of onset, United States, 1990–1999

The most recent epidemic of western equine encephalitis occurred in Colorado in 1987. Reasons for the recent absence of epidemic transmission are not fully understood. The first nationally reported case since 1994 was reported from Minnesota in 1999. During 1964–1999, a median of three (average: 18) cases was reported each year.

BOTULISM (foodborne) — reported cases by year, United States, 1979–1999

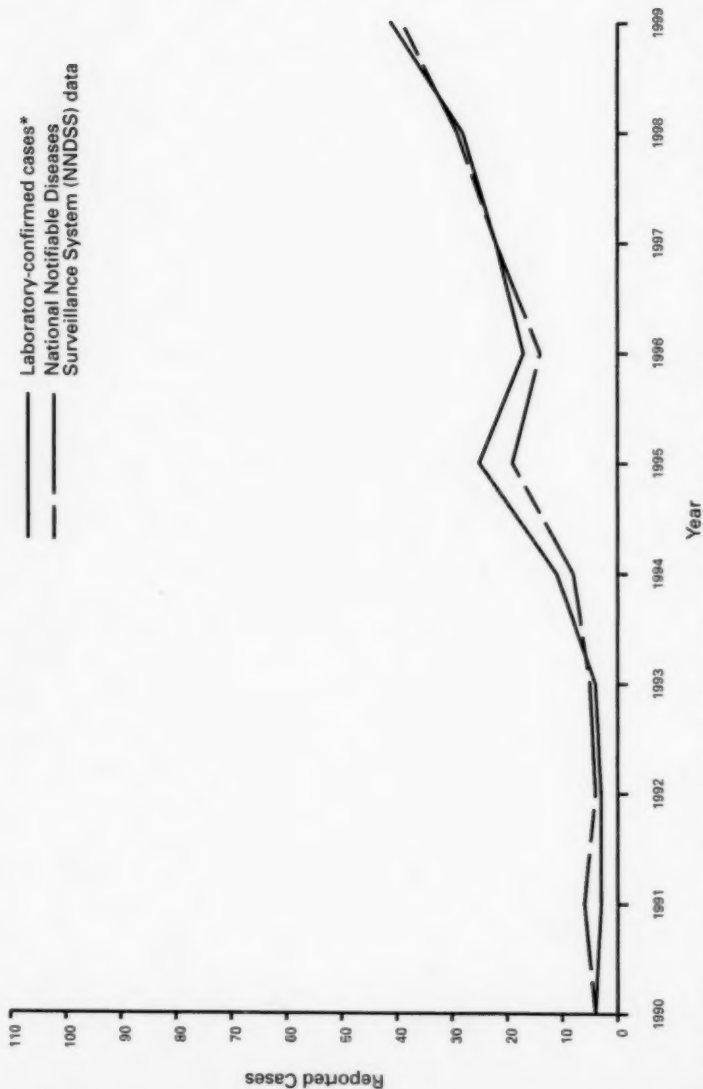
*Data from annual survey of State Epidemiologists and Directors of State Public Health Laboratories.

Foodborne botulism is a rare but potentially fatal disease. Every case of botulism must be treated as a public health emergency, and the contaminated food vehicle and all exposed persons must be identified.

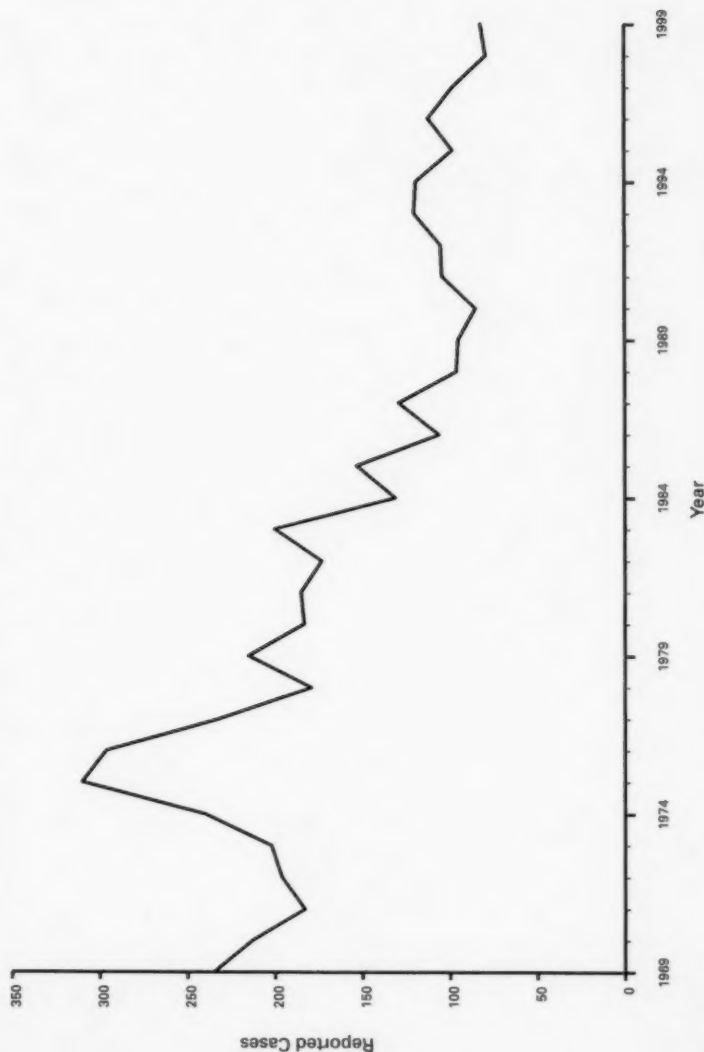
BOTULISM (infant) — reported cases by year, United States, 1979–1999

*Data from annual survey of State Epidemiologists and Directors of State Public Health Laboratories.

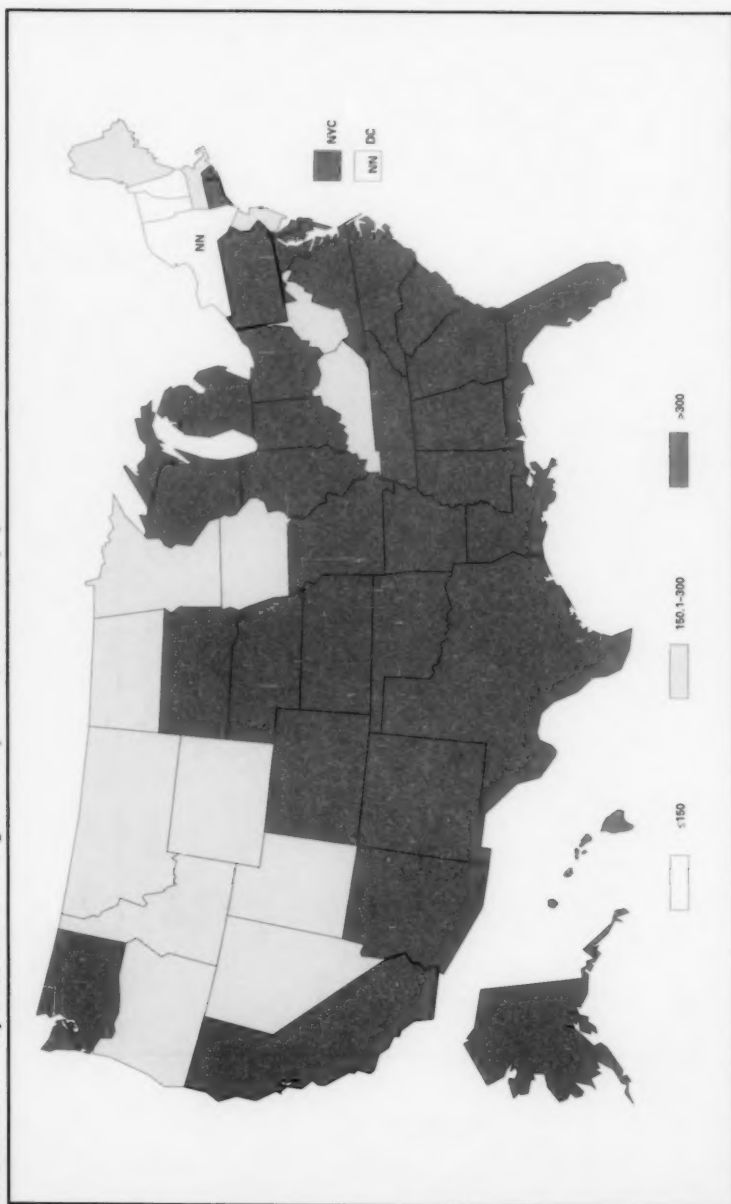
Infant botulism is the most common cause of botulism in the United States. Cases are sporadic, and risk factors remain largely unknown.

BOTULISM, OTHER (includes wound and unspecified) — reported cases by year, United States, 1990–1999

*Data from annual survey of State Epidemiologists and Directors of State Public Health Laboratories. Data for wound botulism only. Wound botulism has increased sharply during the past decade and is now the leading cause of adult botulism in the United States.

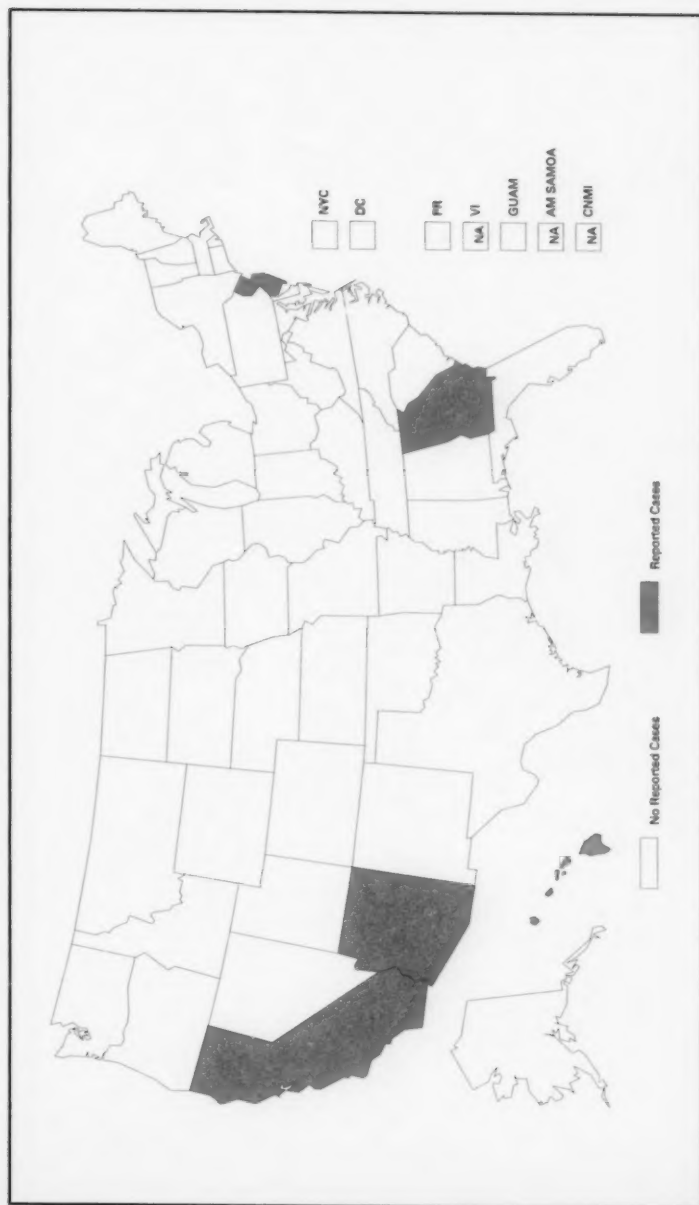
BRUCELLOSIS — reported cases by year, United States, 1969–1999

In 1999, *Brucella abortus* was nearly eliminated from U.S. cattle after a brucellosis control program. The control of *B. abortus* among cattle, combined with other public health programs, has nearly eliminated the risk for brucellosis among U.S. residents. However, the disease remains a threat for travelers and foreign nationals who consume unpasteurized milk products and for lab workers exposed to *Brucella* species.

CHLAMYDIA — reported cases among women per 100,000 female population, United States, 1999

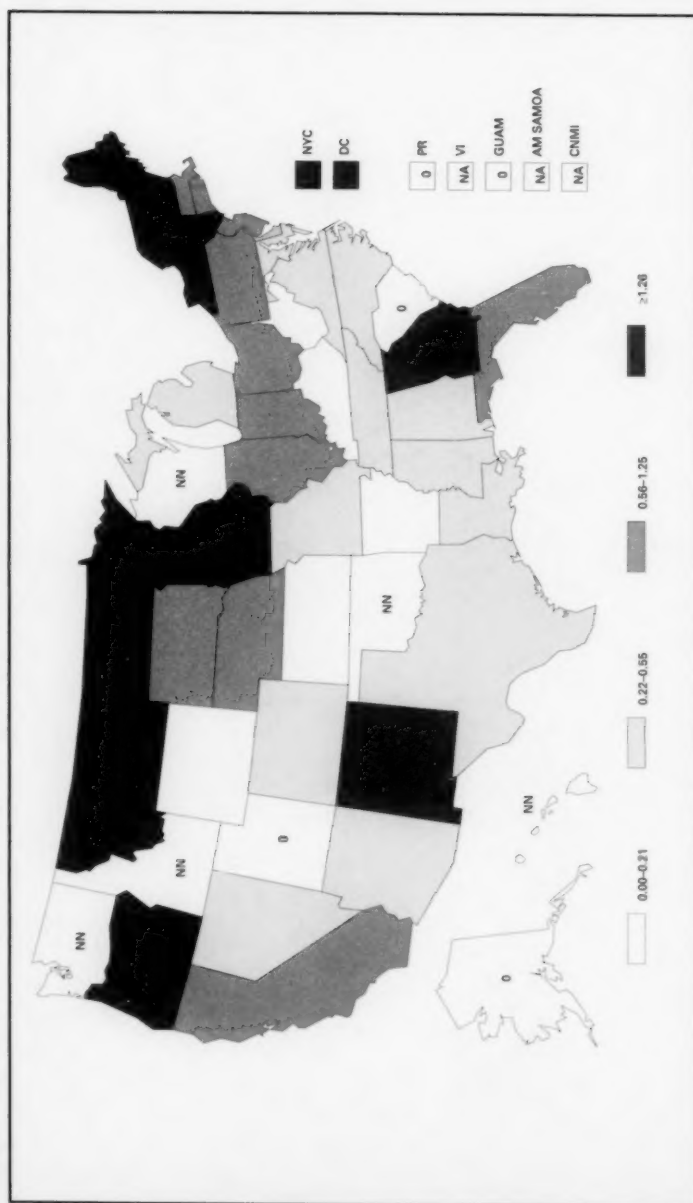
Chlamydia refers to genital infections caused by *Chlamydia trachomatis*. In 1999, the chlamydia rate among women was 400.99 cases/100,000 population. Rates for men are not presented because reporting for men is limited.

CHOLERA — reported cases, United States and territories, 1999



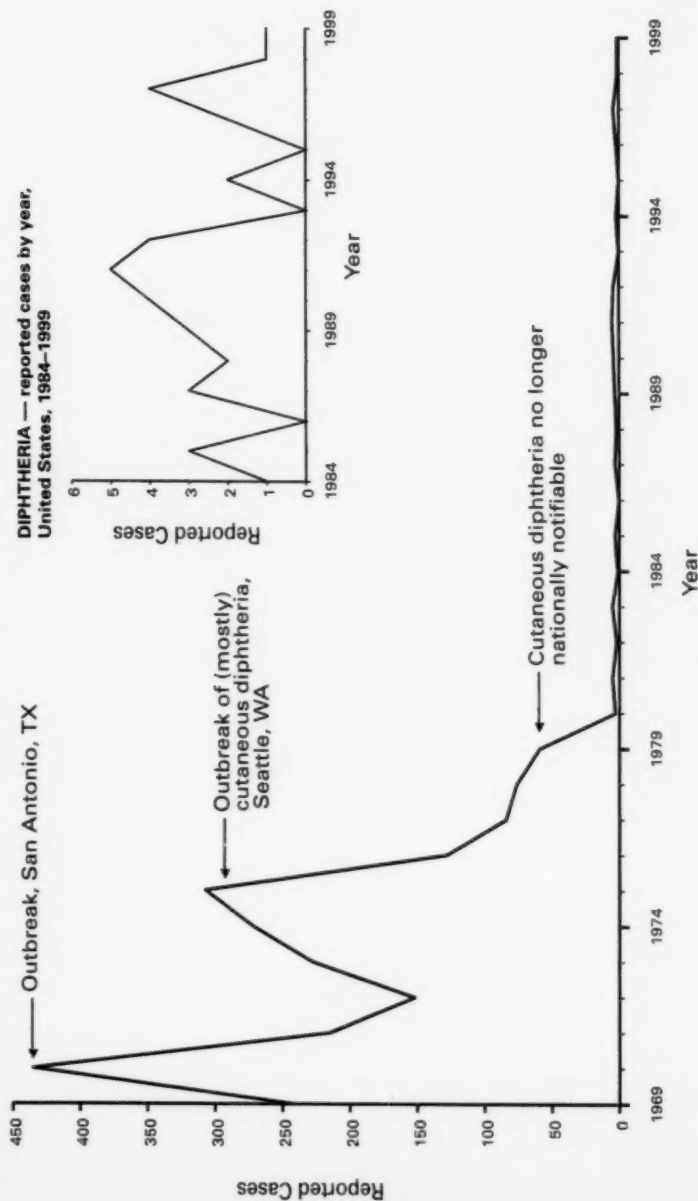
Although cholera has been primarily a disease of travelers to Latin America, Asia, and Africa in recent years, cases are occasionally acquired in the United States from contaminated seafood.

CRYPTOSPORIDIOSIS — reported cases per 100,000 population, United States and territories, 1999



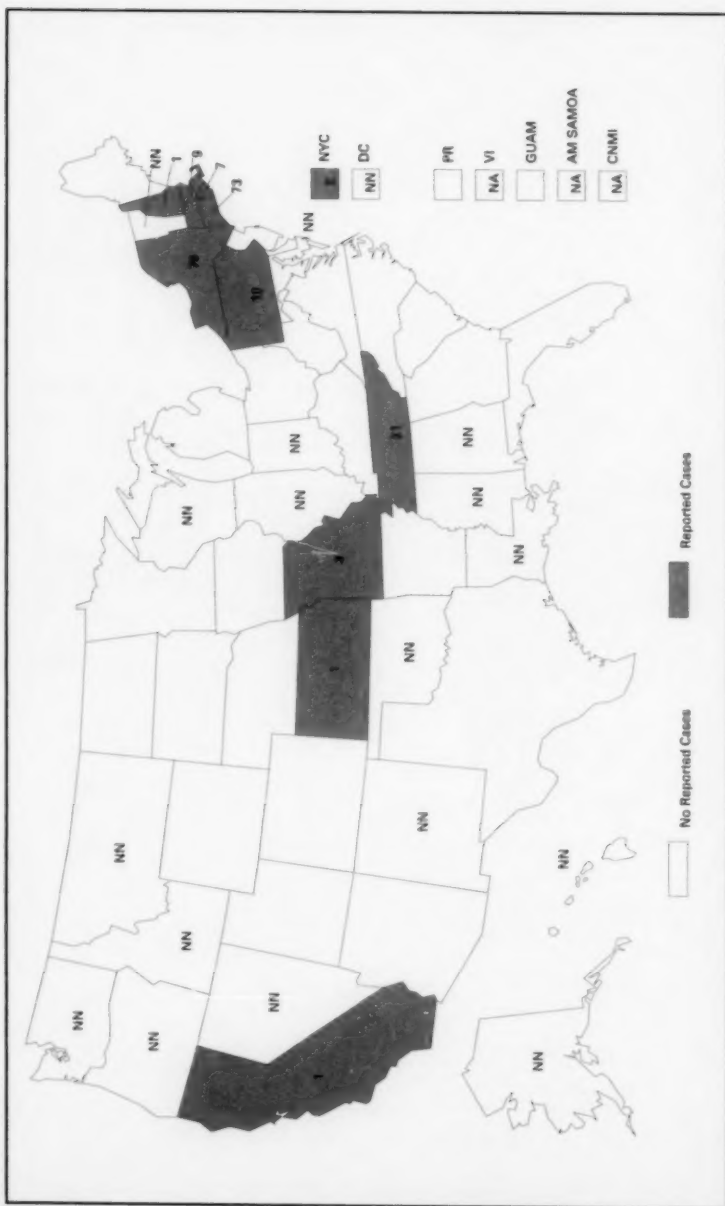
In 1999, *Cryptosporidium* infection was geographically widespread. Waterborne (i.e., from drinking or recreational water) and foodborne outbreaks were reported from Florida, Massachusetts, Minnesota, and Wisconsin. Cases primarily occur in the late summer and early fall and are most prevalent among children aged 1-9 years and adults aged 30-49 years. Case detection and reporting rates can be higher in states that participate in CDC's FoodNet or Emerging Infectious Diseases Program. States participating in 1999 included California, Connecticut, Georgia, Maryland, Minnesota, New York, and Oregon.

DIPHTHERIA — reported cases by year, United States, 1969–1999



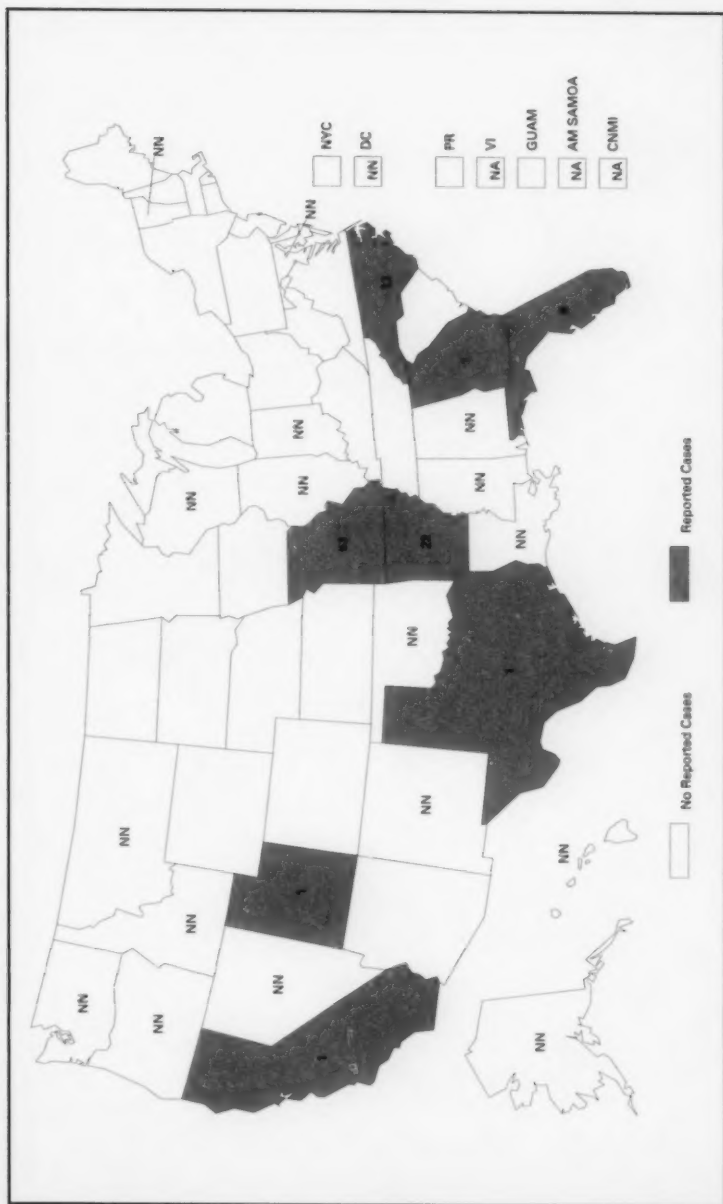
Respiratory diphtheria continues to be rare in the United States. In 1999, only one case of clinical diphtheria associated with a toxigenic strain of *Corynebacterium ulcerans* was reported.

EHRlichiosis, HUMAN GRANULOCYtic — reported cases, United States and territories, 1999



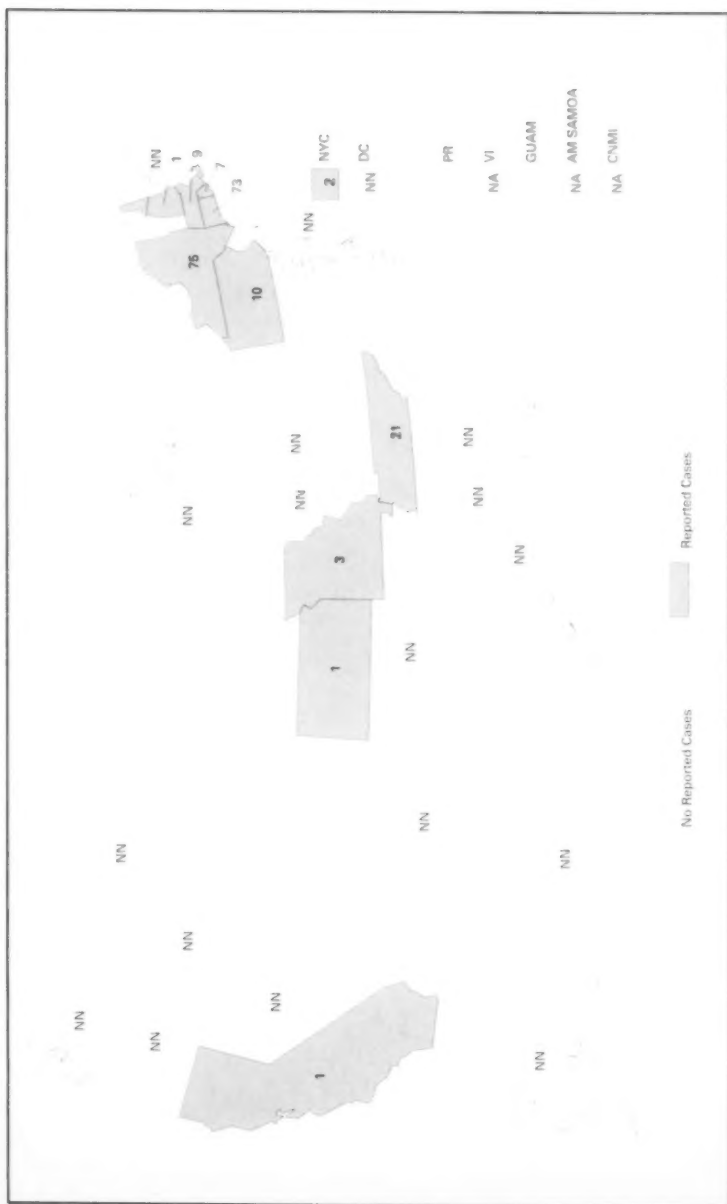
Human ehrlichiosis is an emerging infectious disease that became nationally notifiable in 1999. Identification and reporting of human ehrlichiosis are incomplete, and the number of cases reported here do not represent the overall distribution or regional prevalence of disease.

EHRlichiosis, HUMAN MONOCYTIC — reported cases, United States and territories, 1999



Human ehrlichiosis is an emerging infectious disease that became nationally notifiable in 1999. Identification and reporting of human ehrlichiosis is incomplete, and the number of cases reported here do not represent the overall distribution or regional prevalence of disease.

EHRlichiosis, HUMAN GRANULOCYTIC — reported cases, United States and territories, 1999



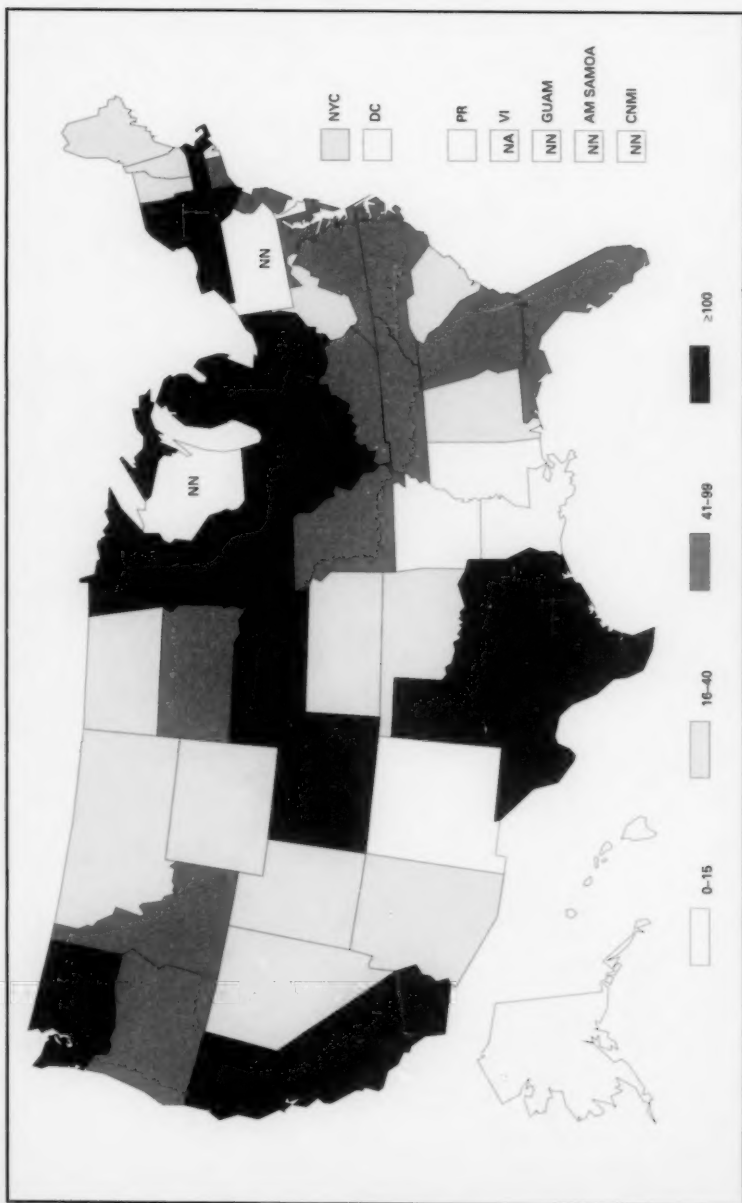
Human ehrlichiosis is an emerging infectious disease that became nationally notifiable in 1999. Identification and reporting of human ehrlichiosis are incomplete, and the number of cases reported here do not represent the overall distribution or regional prevalence of disease.

EHRlichiosis, HUMAN MONOCYTIC — reported cases, United States and territories, 1999



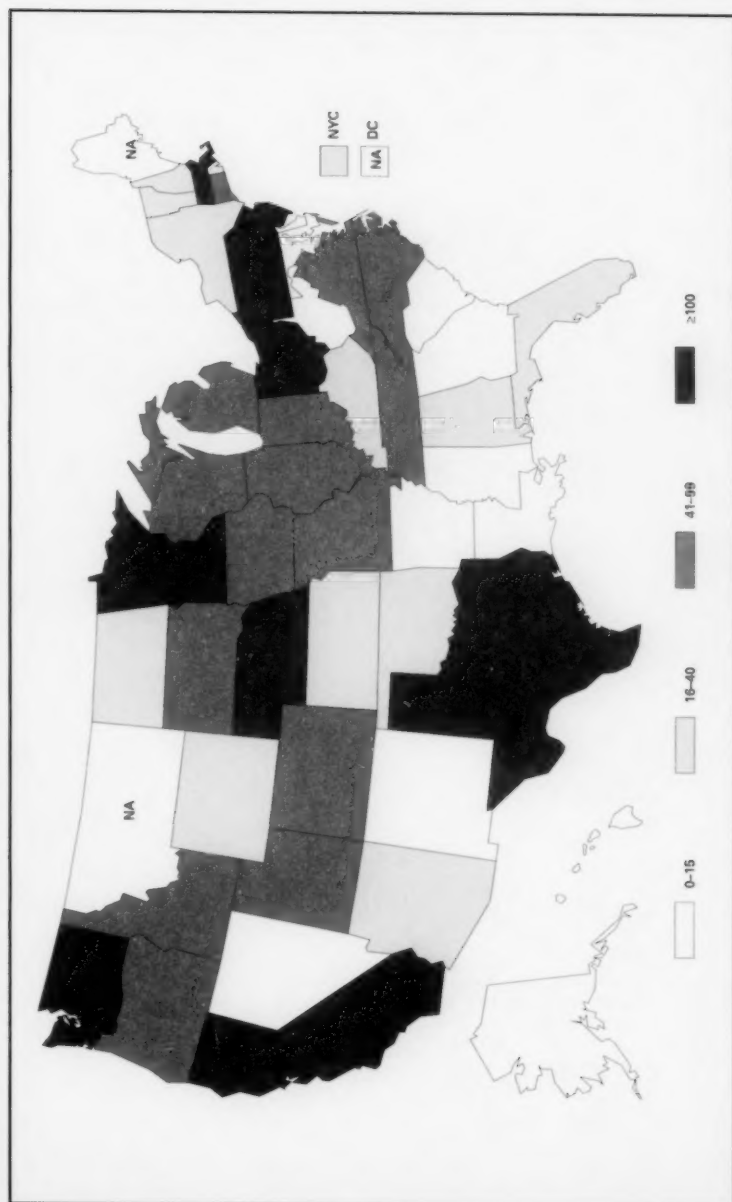
Human ehrlichiosis is an emerging infectious disease that became nationally notifiable in 1999. Identification and reporting of human ehrlichiosis is incomplete, and the number of cases reported here do not represent the overall distribution or regional prevalence of disease.

ESCHERICHIA COLI O157:H7 — reported cases, United States and territories, 1999



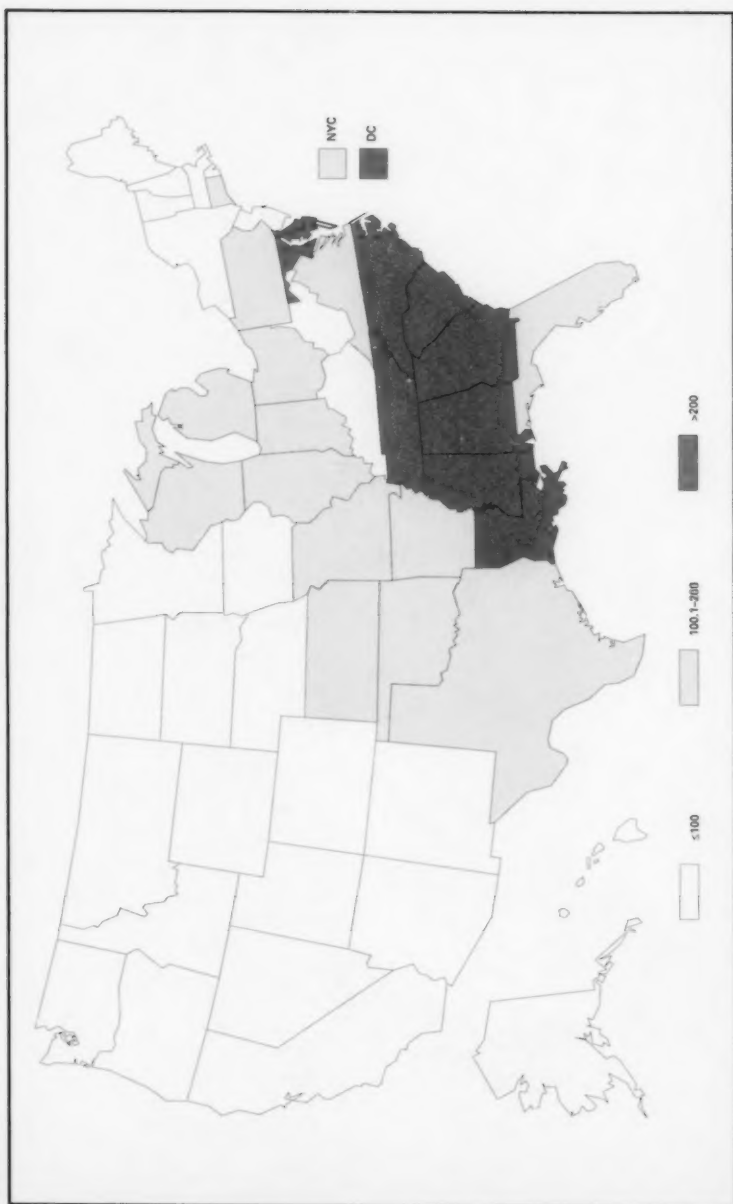
The number of states in which *Escherichia coli* O157:H7 infection is a notifiable disease increased to 48 in 1999. However, because <60% of clinical laboratories routinely test all stool specimens — or even all bloody stool specimens — for *E. coli* O157:H7, many infections are not recognized or reported.

ESCHERICHIA COLI O157:H7 — reported isolates,* United States, 1999



*Data from the Public Health Laboratory Information System (PHLIS).

Only *Escherichia coli* O157:H7 isolates confirmed by a state public health laboratory are reported to the Public Health Laboratory Information System (PHLIS). Many public health laboratories can subtype isolates using pulsed-field gel electrophoresis and compare their findings electronically with other states through PulseNet, a national network of public health laboratories.

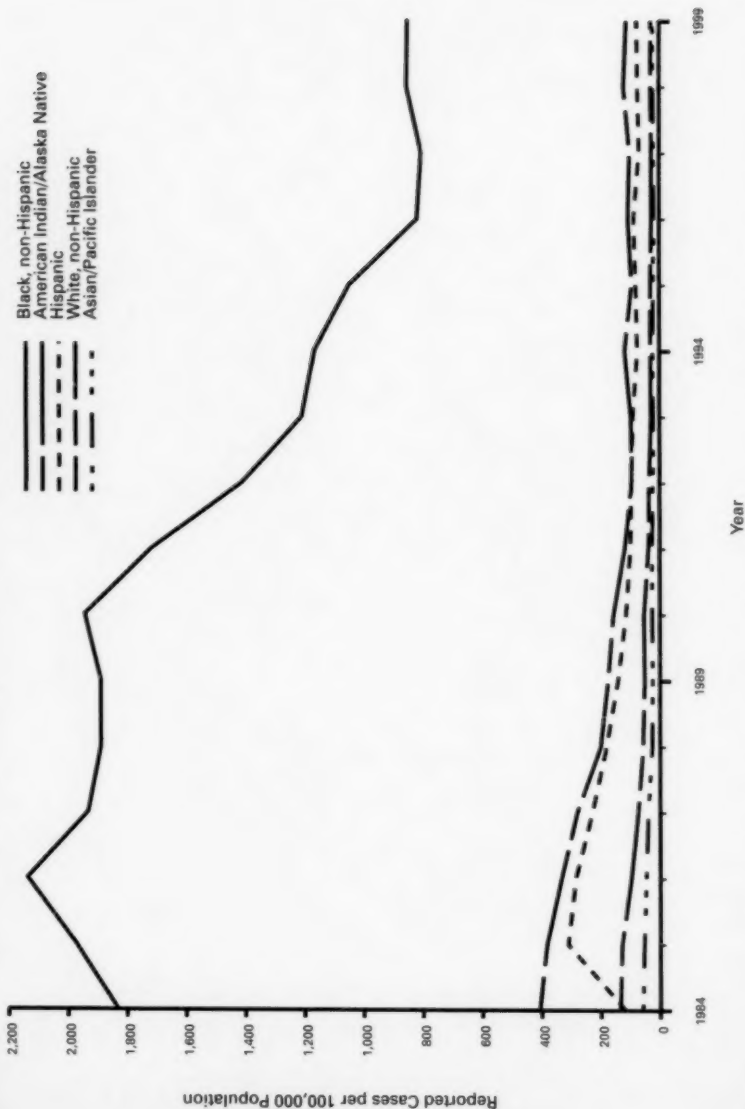
GONORRHEA — reported cases per 100,000 population, United States, 1999

In 1999, the overall U.S. rate of gonorrhea was 133.2 cases/100,000 population. Twenty-six states reported gonorrhea rates below the revised *Healthy People 2000* national objective of ≤100 cases/100,000 population.

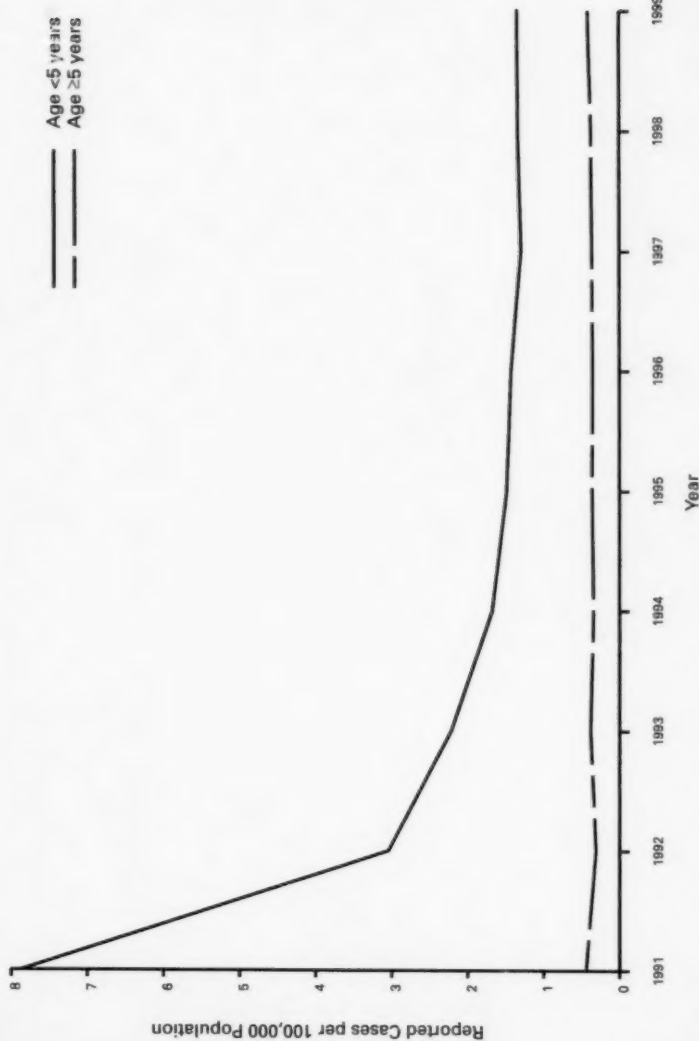
GONORRHEA — reported cases per 100,000 population by sex, United States, 1984–1999

In 1999, the overall U.S. rate of gonorrhea was 133.2 cases/100,000 population, a 1.2% increase from 1998 (131.6). Among men, the rate increased from 132.7 in 1998 to 136.0 in 1999. Among women, the rate decreased only slightly from 130.0 in 1998 to 129.9 in 1999 (Division of Sexually Transmitted Diseases Prevention, National Center for HIV, STD, and TB Prevention).

GONORRHEA — reported cases per 100,000 population by race and ethnicity, United States, 1984–1999

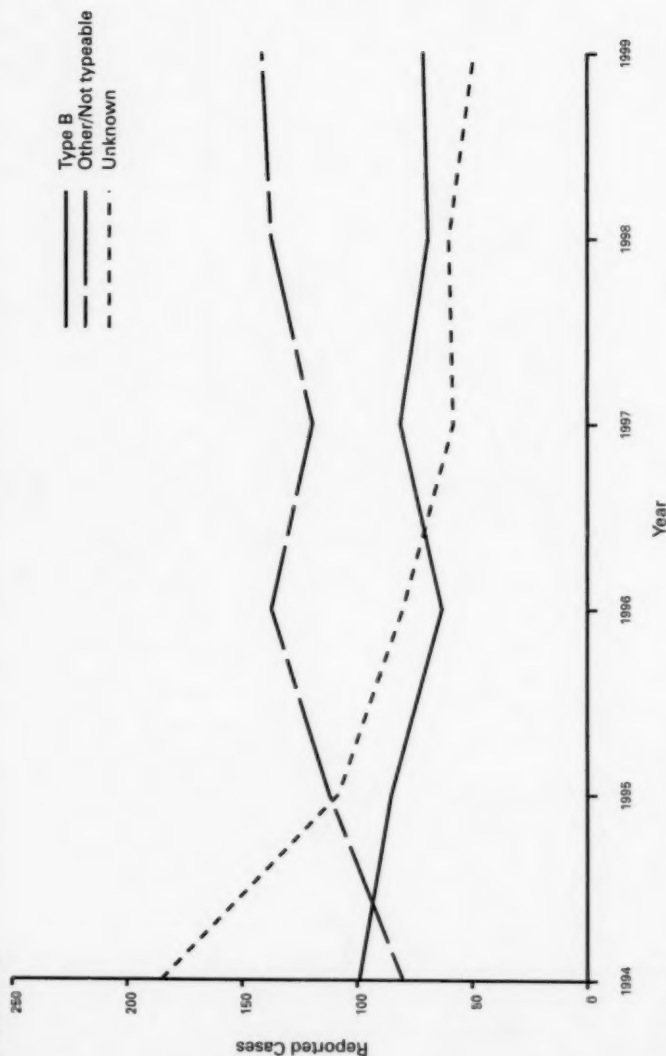


In 1999, gonorrhea rates decreased among non-Hispanic whites, non-Hispanic blacks, and American Indian/Alaska Natives, but increased among Hispanics and Asian/Pacific islanders.

HAEMOPHILUS INFLUENZAE, INVASIVE DISEASE — reported cases per 100,000 population by age group, United States, 1991–1999

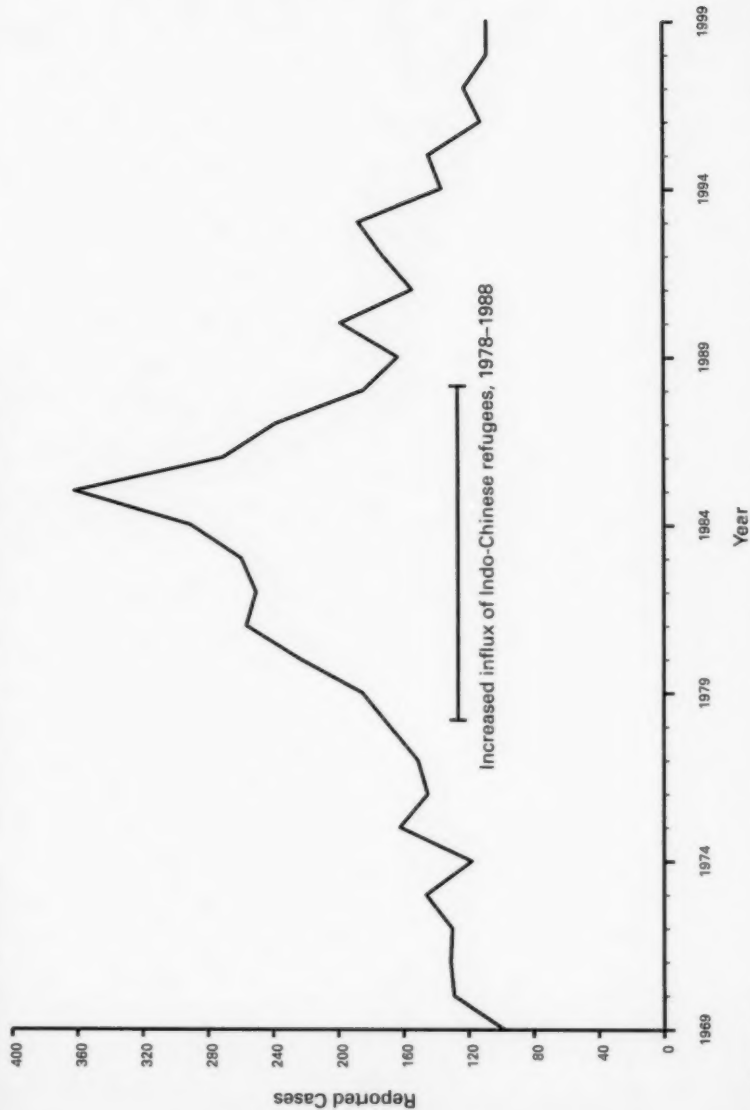
Before the introduction of a *Haemophilus influenzae* type b (Hib) vaccine in December 1987, the incidence of Hib invasive disease among children aged <5 years was approximately 100 cases/100,000 population. In 1999, a total of 266 cases of all serotypes of *H. influenzae* invasive disease among children aged <5 years was reported (incidence: 1.2/100,000 children), with 72 (27%) cases caused by Hib (National Immunization Program).

HAEMOPHILUS INFLUENZAE, INVASIVE DISEASE — reported cases by year and serotype among children <5 years,* United States, 1994–1999

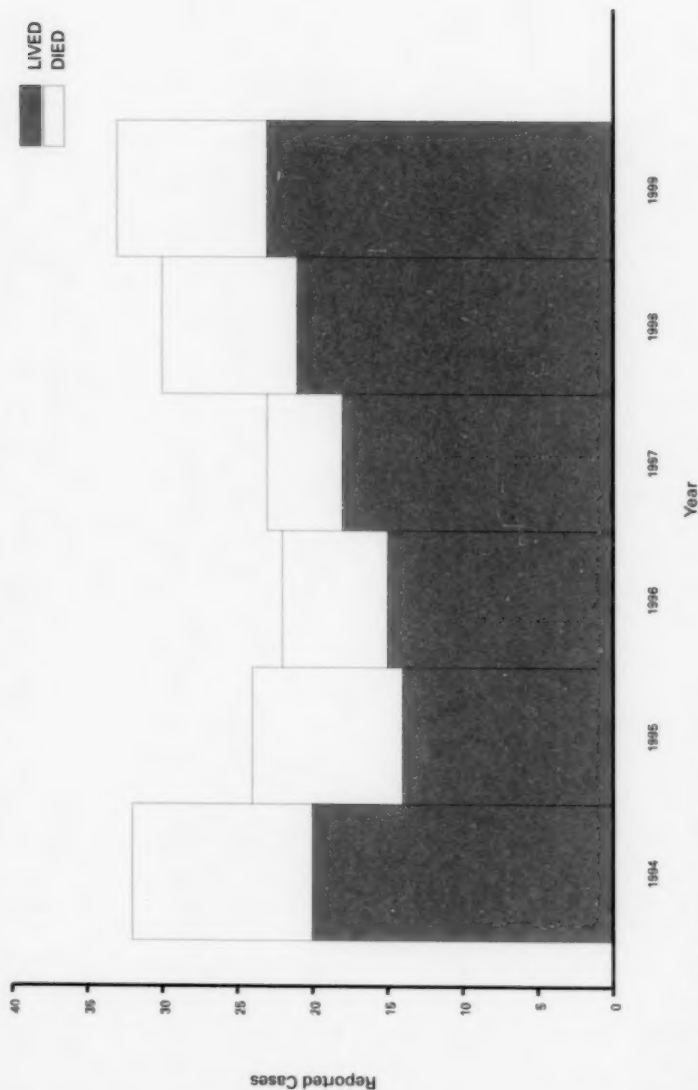


*Data from National Immunization Program.

In 1999, serotype information was reported for 81% of 266 *Haemophilus influenzae* (Hi) invasive disease cases among children aged <5 years, compared with 41% of 340 cases reported in 1994 (National Immunization Program). Serotype information is needed to monitor progress toward *H. influenzae* type b (Hib) elimination. Because slide agglutination serotyping results can be misinterpreted (e.g., non-typeable Hi isolates reported as Hib), CDC is evaluating the use of both slide agglutination and polymerase chain reaction testing to better assess Hib cases.

HANSEN DISEASE (leprosy) — reported cases by year, United States, 1969–1999

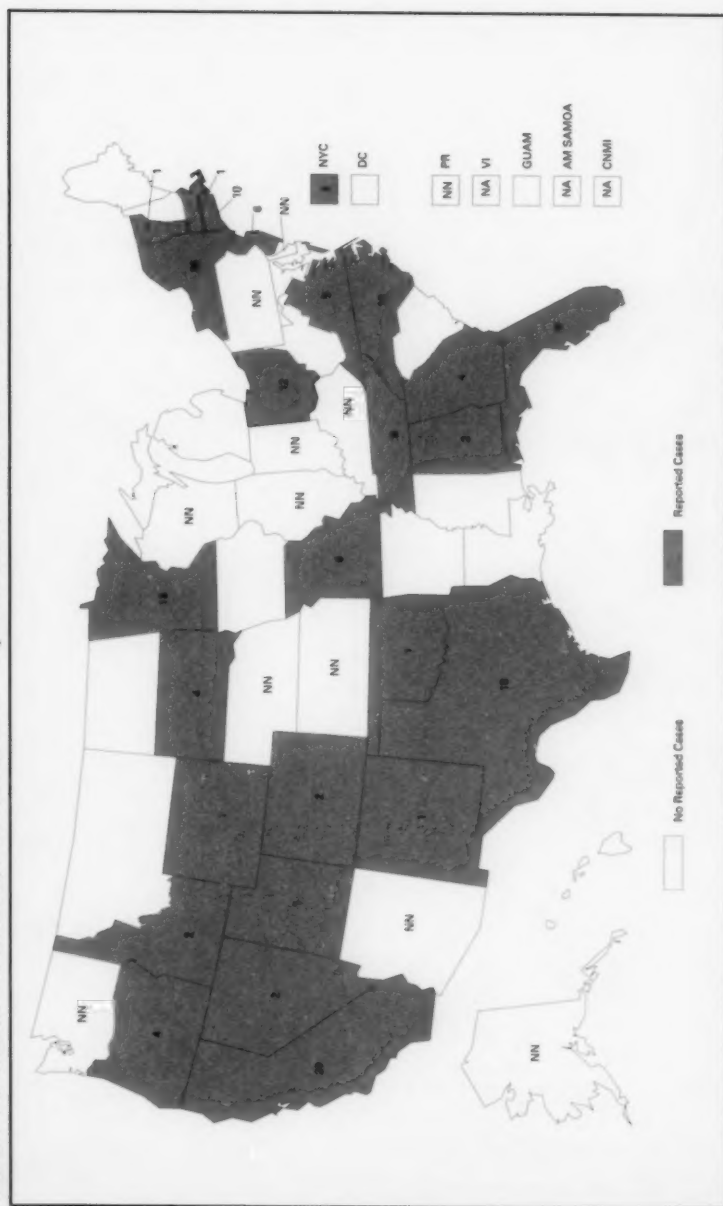
In 1999, a total of 108 cases of Hansen disease was reported in the United States. The number of cases peaked at 361 in 1985, and since 1988, has remained relatively stable.

HANTAVIRUS PULMONARY SYNDROME — reported cases by survival status,* by year, United States, 1994–1999

*Data from National Center for Infectious Diseases.

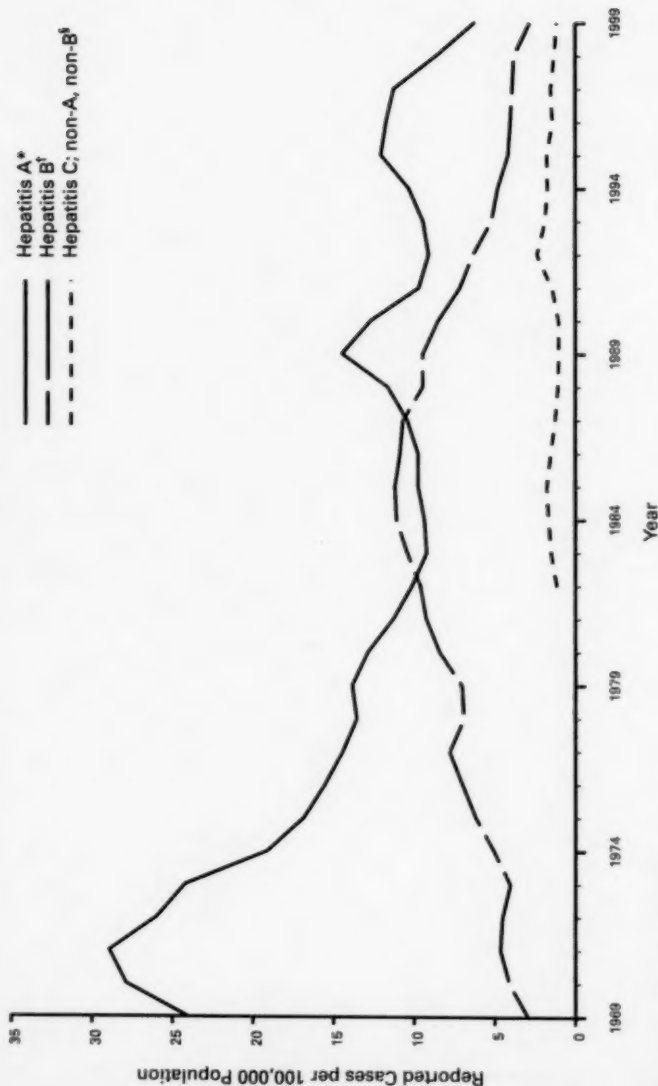
In 1999, hantavirus pulmonary syndrome cases were reported from 14 states. Most cases occur in the western United States, but Indiana and Pennsylvania also reported cases in 1999. California, Pennsylvania, and Washington reported substantial increases in cases since 1998.

HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL — reported cases, United States and territories, 1999



In the United States, most cases of postdiarrheal hemolytic uremic syndrome are caused by infection with *Escherichia coli* O157:H7 or other *E. coli* bacteria that produce Shiga toxin.

HEPATITIS — reported cases per 100,000 population by year, United States, 1969–1999



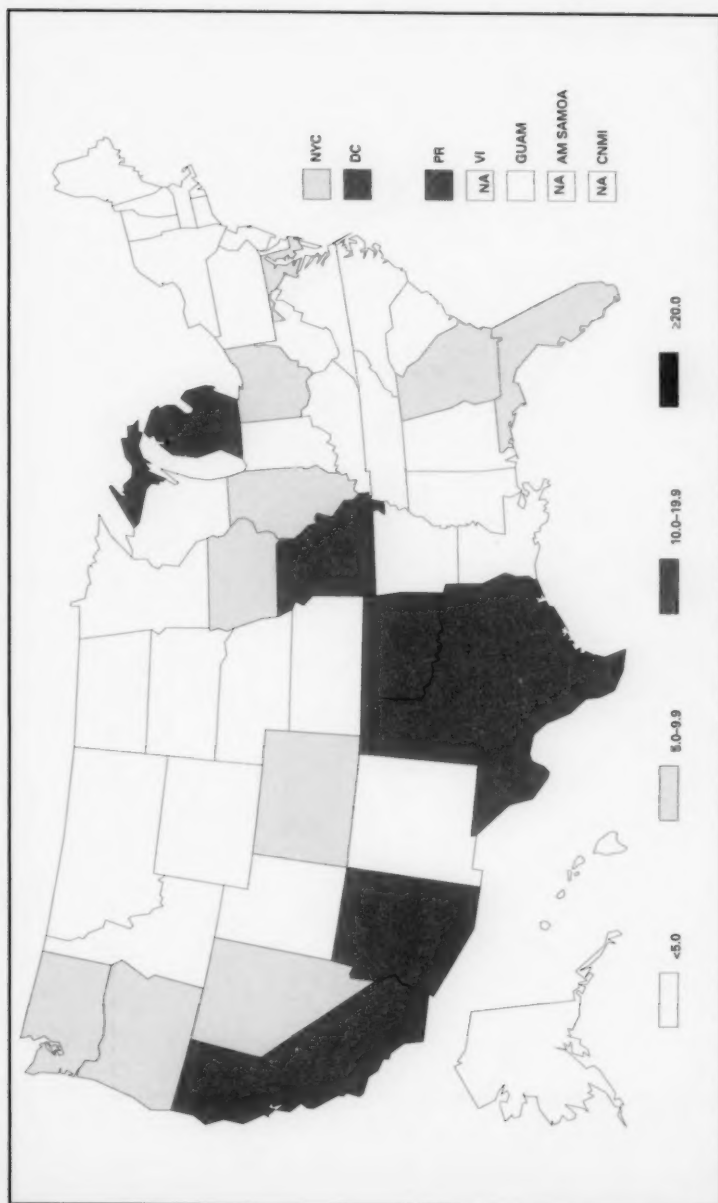
*Hepatitis A vaccine was first licensed in 1995.

†Hepatitis B vaccine was first licensed in 1982.

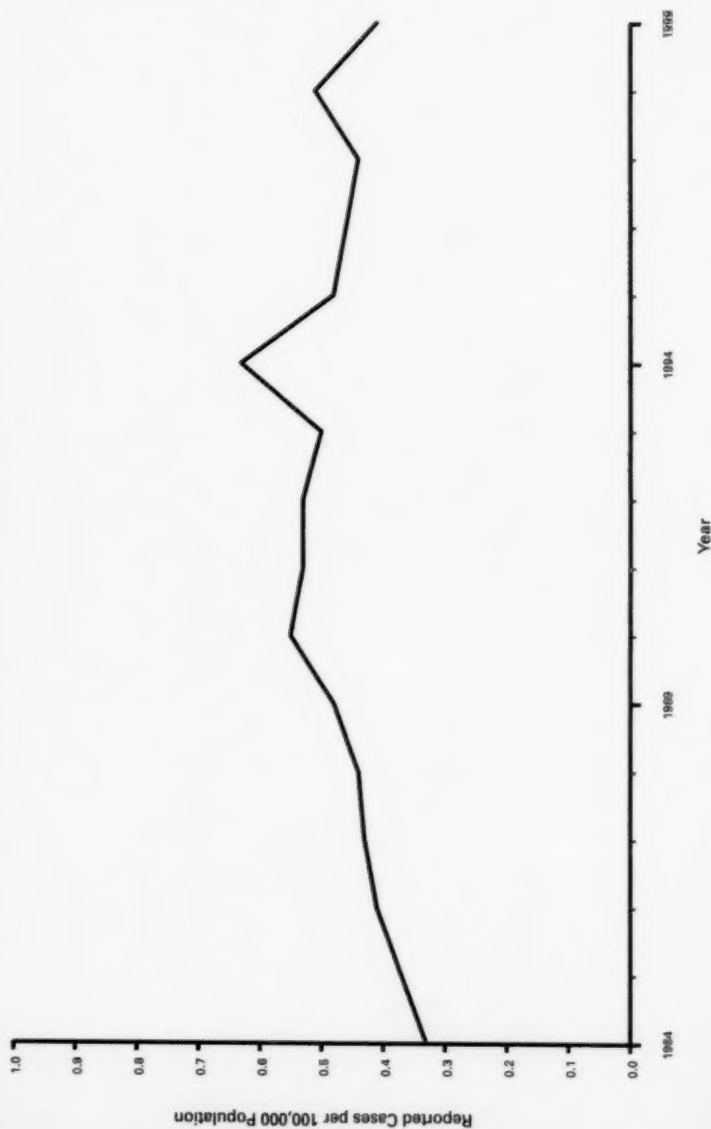
‡An anti-HCV (hepatitis C virus) antibody test first became available in 1990.

In 1999, the hepatitis A rate was the lowest ever recorded, but cyclic increases are observed approximately every 10 years. Hepatitis B incidence continues to decline, but asymptomatic infections and underreporting mean that reported cases represent only a fraction of actual infections (i.e., approximately 185,000 new infections annually during 1995–1998). The trend in reported hepatitis C (non-A, non-B) cases after 1990 is misleading because reported cases included those based only on a positive lab test for anti-HCV, most of which represent chronic HCV infection.

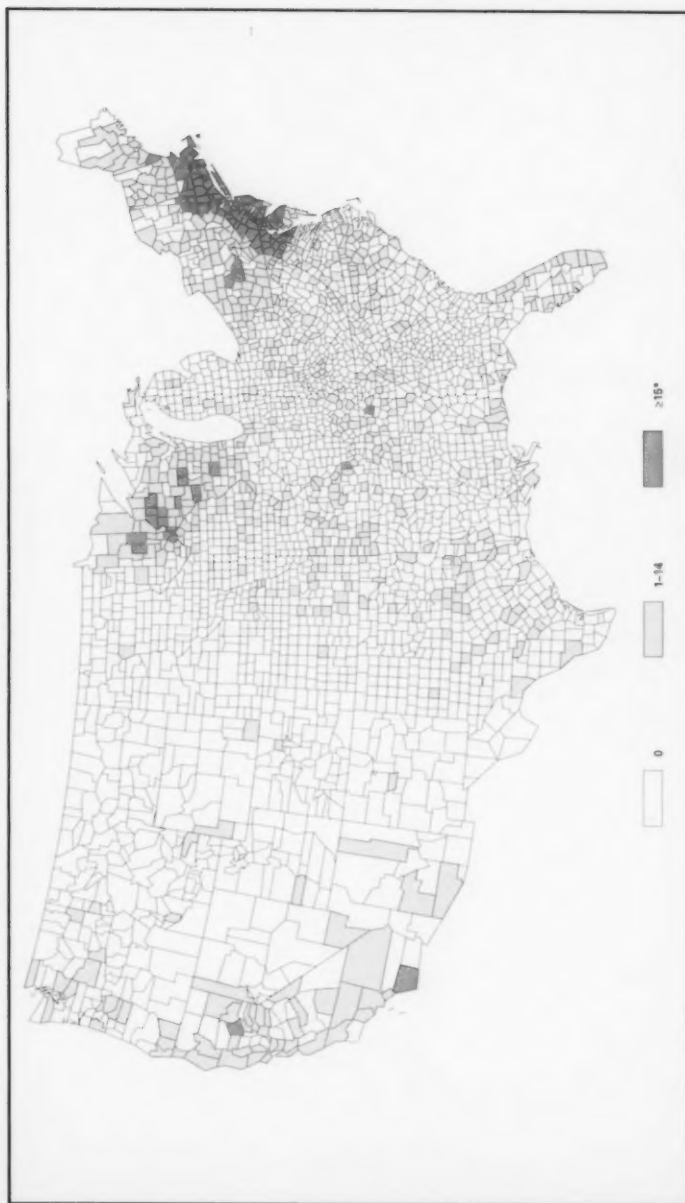
HEPATITIS A — reported cases per 100,000 population, United States and territories, 1999



As in previous years, the hepatitis A rate was higher in the western United States than other regions. In states with consistently elevated hepatitis A virus (HAV) infection rates, widespread routine vaccination of children is needed to prevent and control HAV transmission.

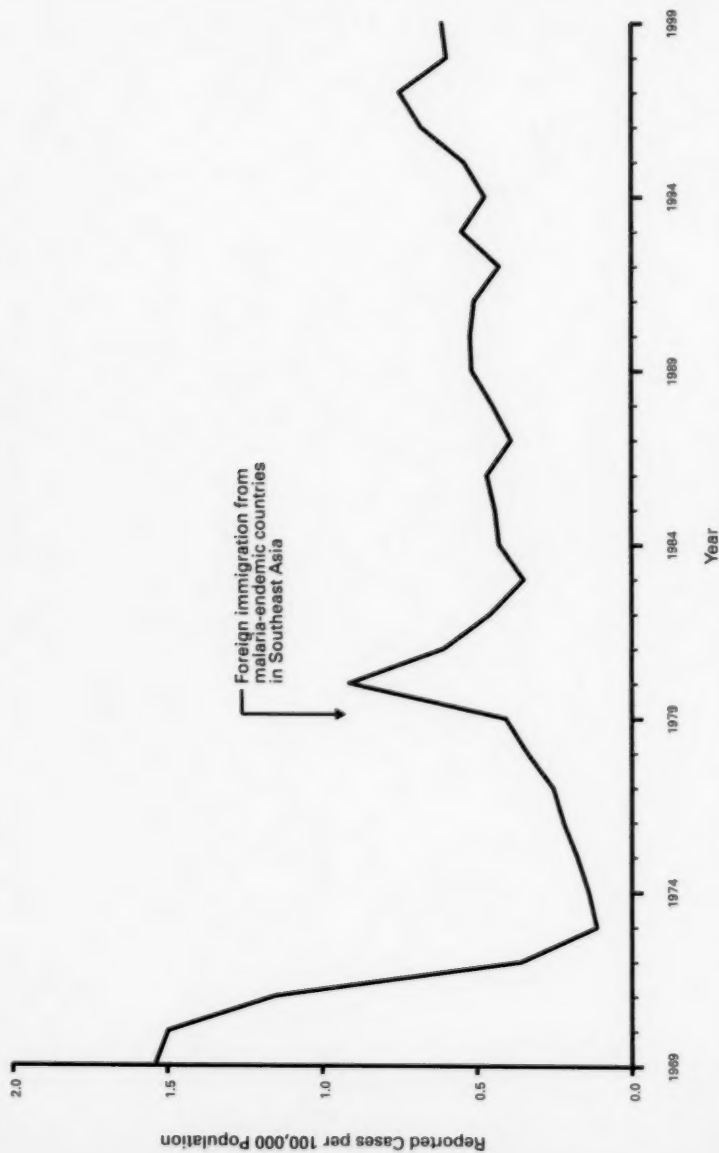
LEGIONELLOSIS — reported cases per 100,000 population by year, United States, 1984–1999

In 1999, the overall reported rate of legionellosis, also called Legionnaires' disease, was 0.41 cases/100,000 population. However, data from population-based studies indicate that the actual rate is approximately 10 times higher.

LYME DISEASE — reported cases by county, United States and territories, 1999

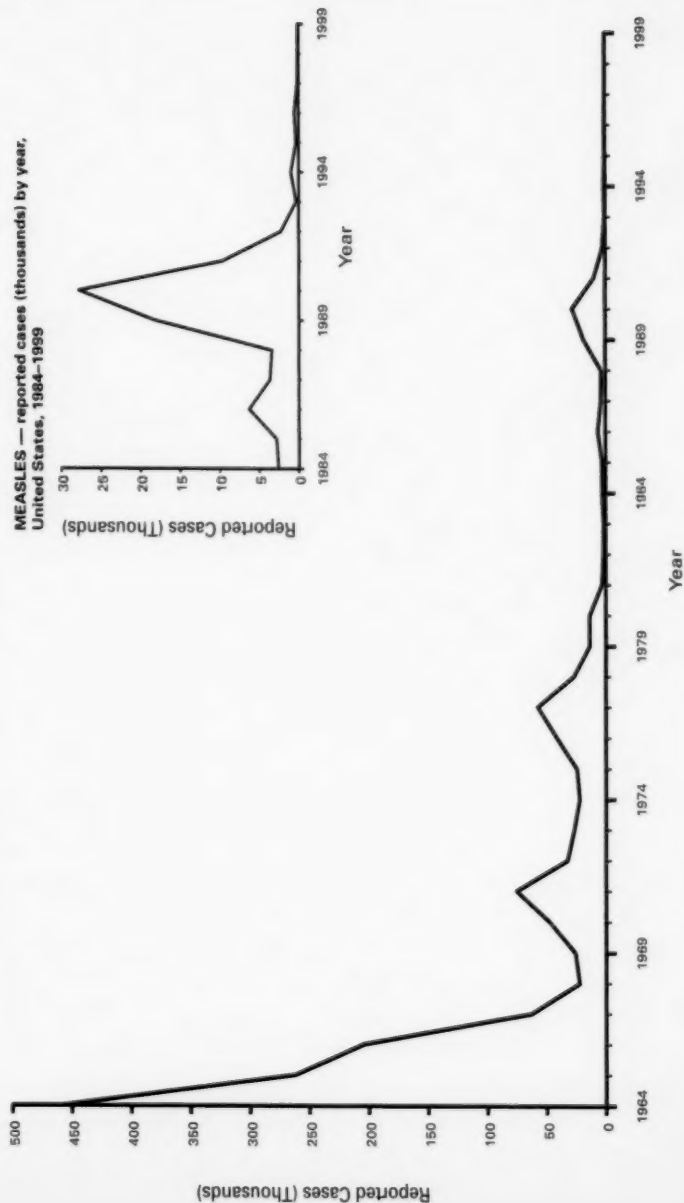
*The total number of cases from these counties represented 90% of all cases reported in 1999.

By integrating prevention strategies into community-based programs, CDC and state health departments hope to achieve the *Healthy People 2010* goal of reducing the incidence of Lyme disease to 9.7 cases/100,000 population in endemic states.

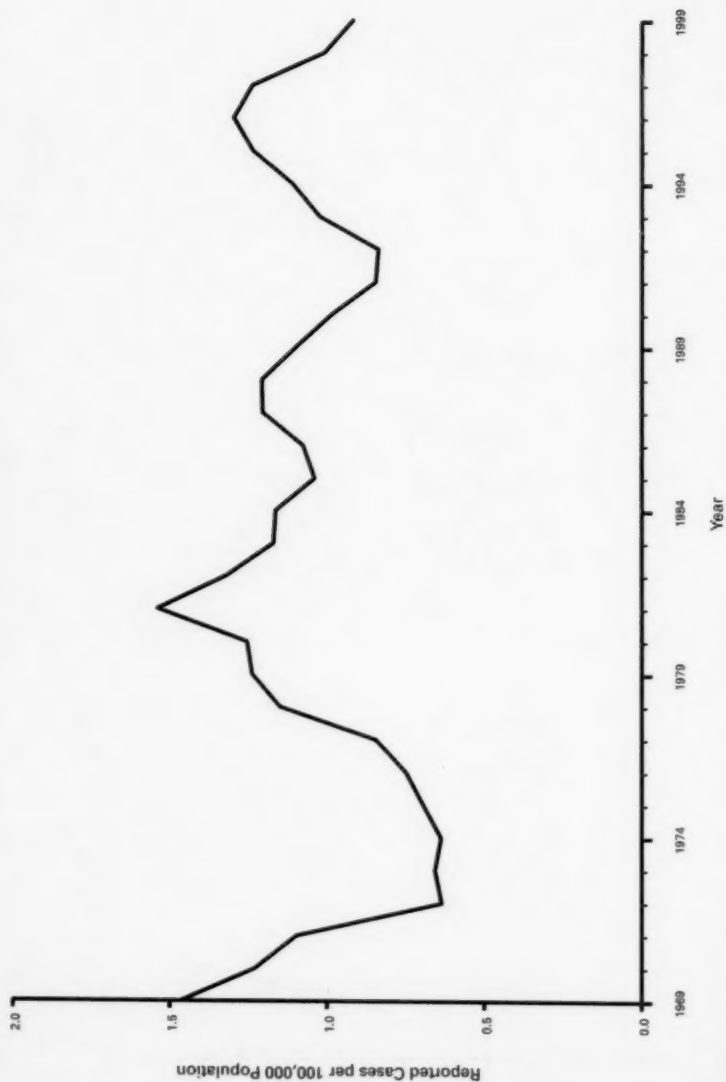
MALARIA — reported cases per 100,000 population by year, United States, 1969–1999

Imported malaria cases have increased during the past 15 years, likely because of increased international travel and immigration.

MEASLES — reported cases (thousands) by year, United States, 1964–1999

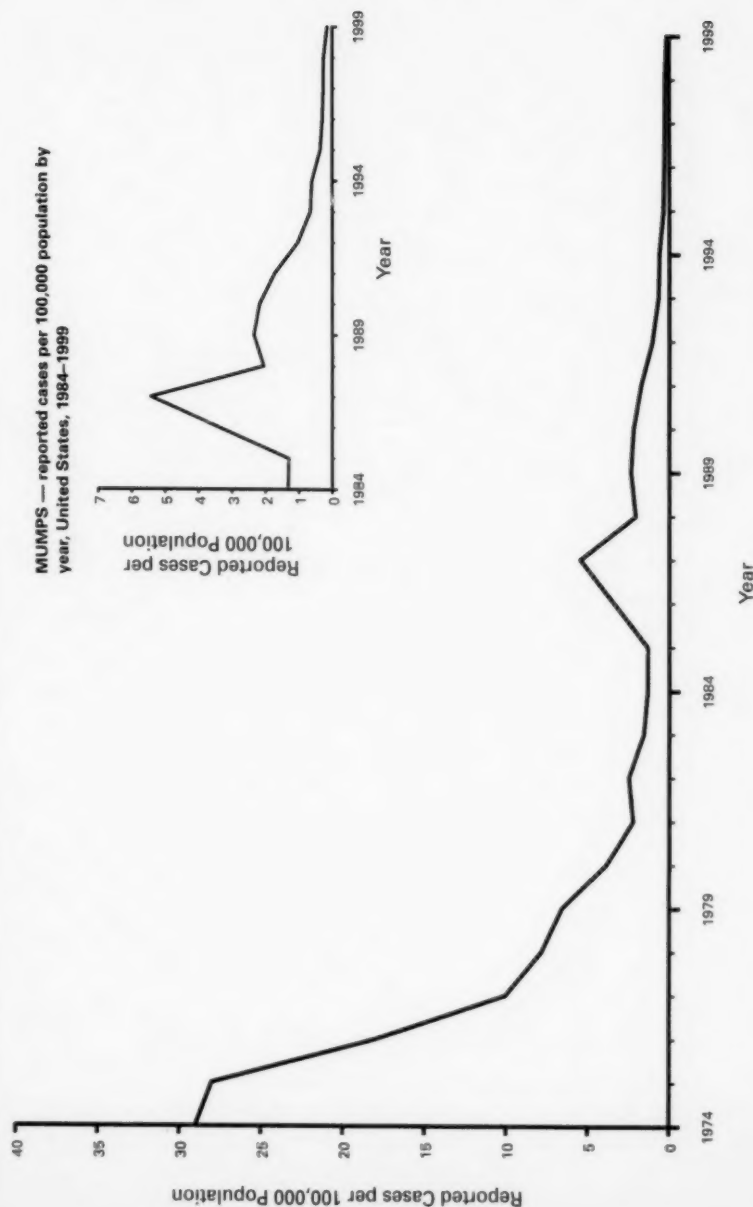


Measles incidence remained at <1 case/1,000,000 population for the third consecutive year, with 100 cases reported in 1999. Of these cases, 66% were imported from outside the United States. Measles is not currently endemic in this country.

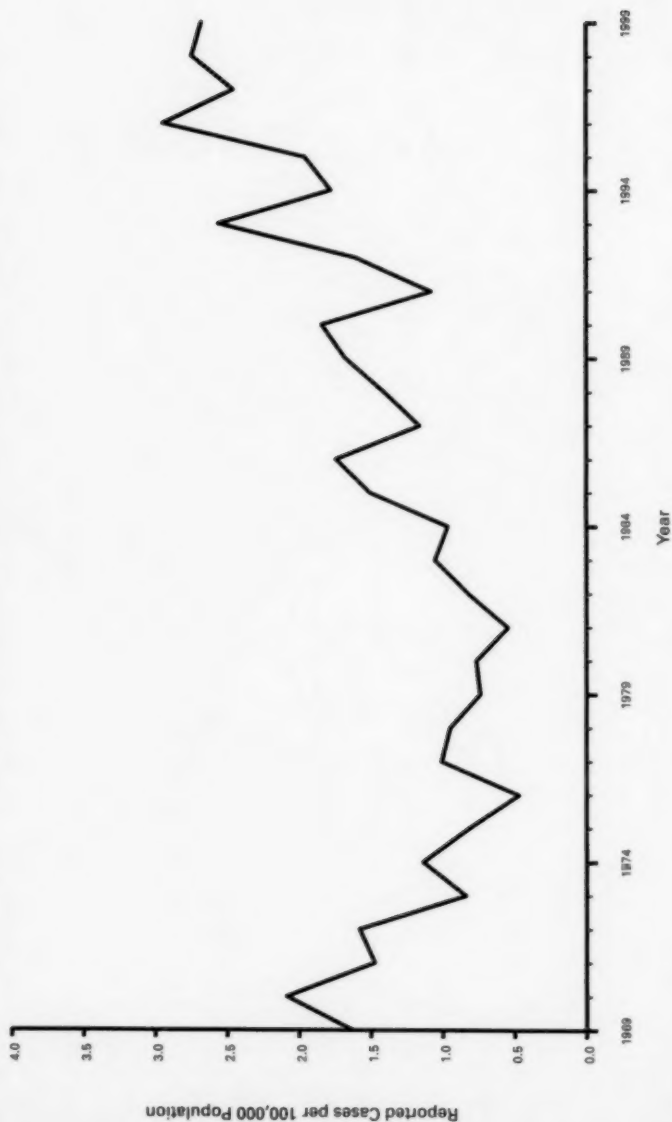
MENINGOCOCCAL DISEASE — reported cases per 100,000 population by year, United States, 1969–1999

Meningococcal disease rates have remained stable since the 1960s, with 2,501 cases reported in 1999. However, case fatality rates remain high: of the 1,091 patients with outcome reported in 1999, a total of 12.5% died. Serogroup information was reported for 36.7% of cases, with serogroups B, C, and Y each accounting for approximately one-third of these cases.

MUMPS — reported cases per 100,000 population by year, United States, 1974–1999



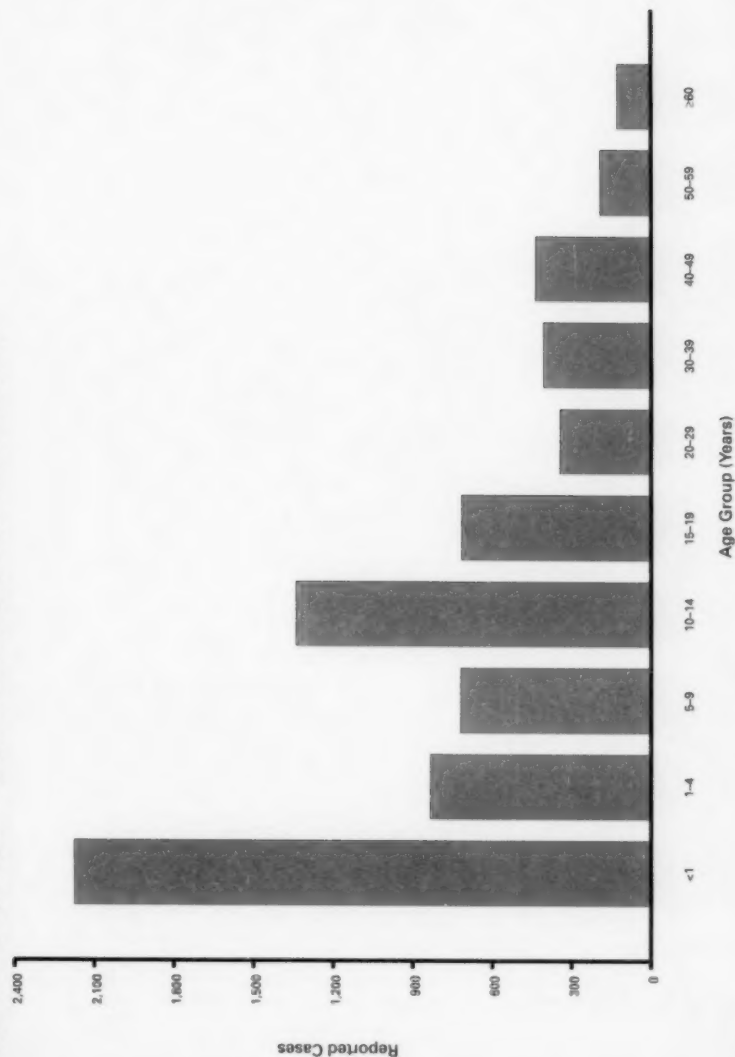
In 1999, a record low of 387 mumps cases was reported, meeting the *Healthy People 2000* objective of 500 cases per year.

PERTUSSIS (whooping cough) — reported cases per 100,000 population by year, United States, 1969–1999

Pertussis epidemics occur every 3–4 years. In 1996, the highest number of pertussis cases (7,796) since 1967 was reported (incidence: 2.9 cases/100,000 population). Since 1993, the number of cases reported after each epidemic year has not returned to the baseline of the pre-epidemic year.

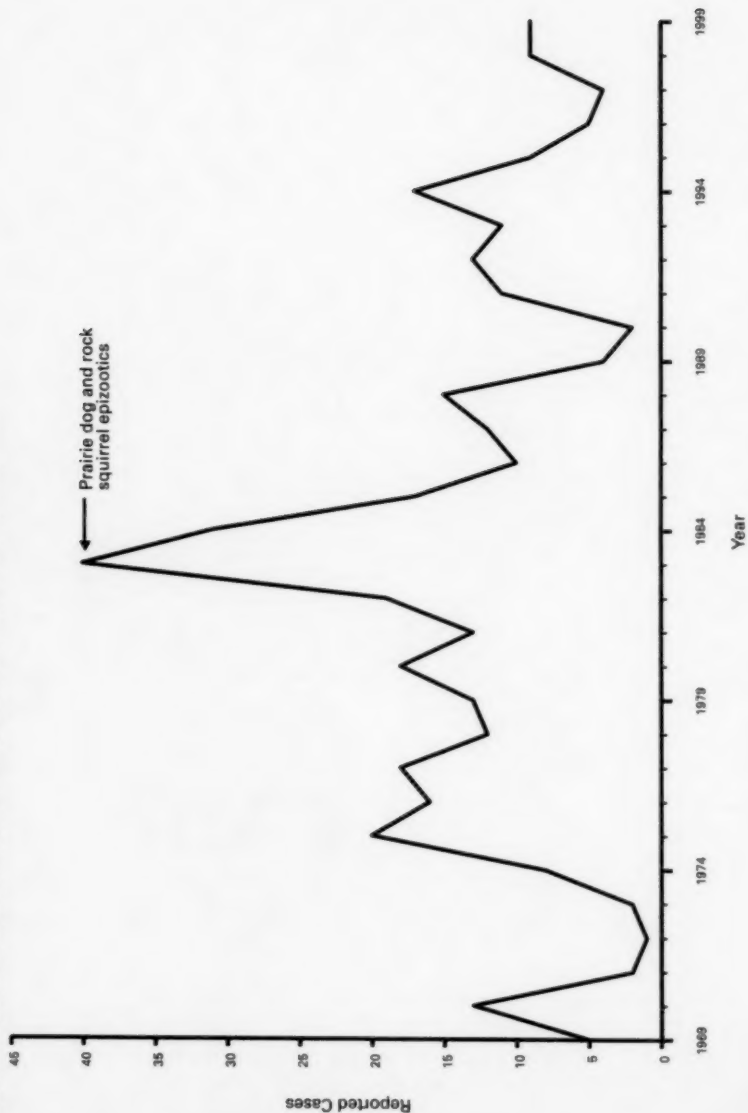
Note: A pertussis vaccine was first licensed in 1949.

PERTUSSIS (whooping cough) — reported cases by age group, United States, 1999

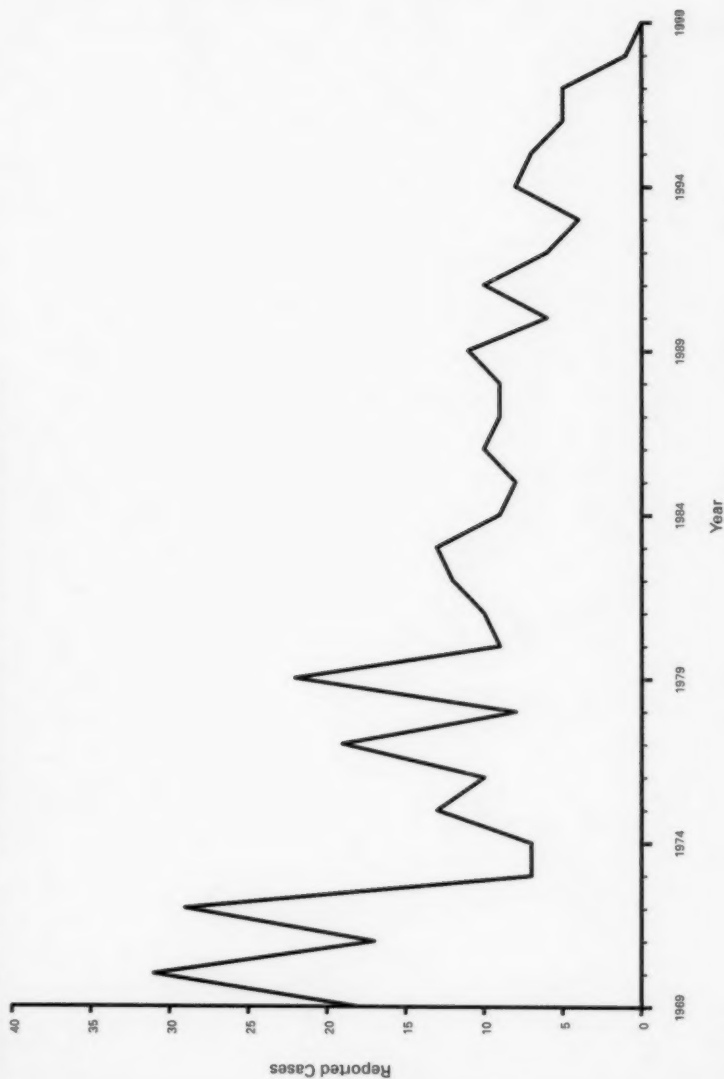


Most reported cases of pertussis continue to occur among children aged <1 year, but cases among adolescents and adults are increasingly reported to CDC. In 1999, a total of 49% of all reported cases occurred among persons aged ≥10 years. The proportion of reported cases among persons aged ≥10 years was 24% during 1990-1992, 29% during 1993-1995, and 46% during 1996-1999.

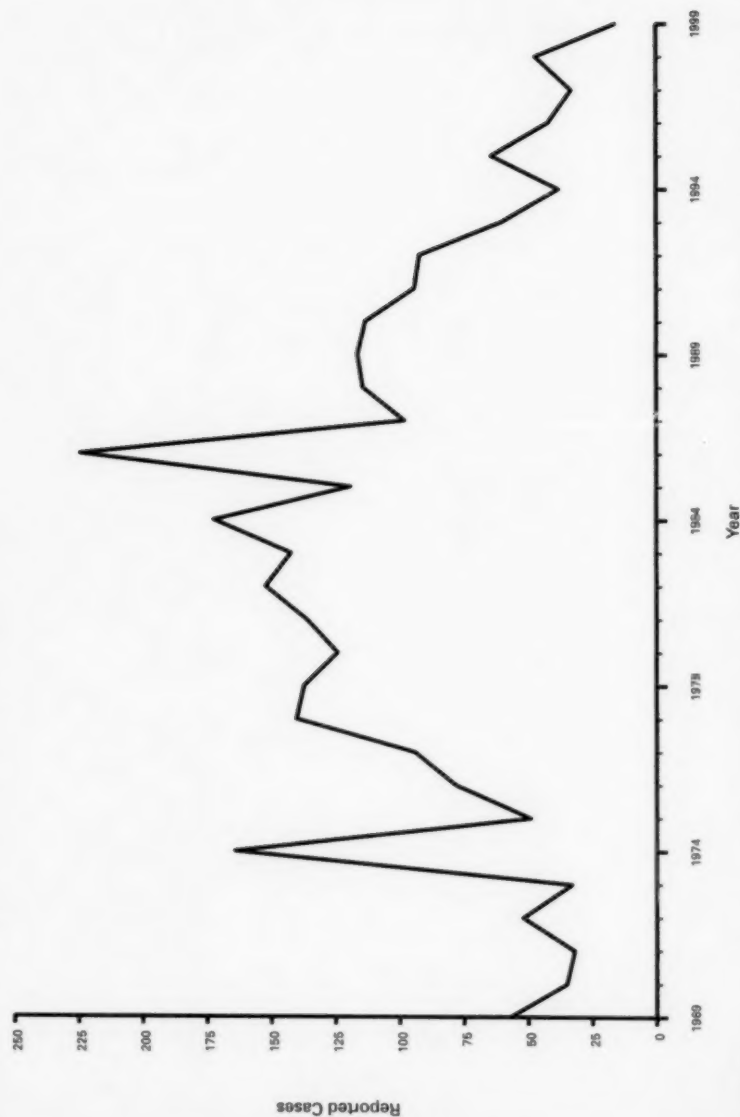
PLAGUE — reported cases among humans, by year, United States, 1969–1999



In 1999, nine laboratory-confirmed cases (one fatal) of human plague were identified (three in Colorado and six in New Mexico). All cases were naturally acquired from handling infected animals or being bitten by infectious wild rodent fleas.

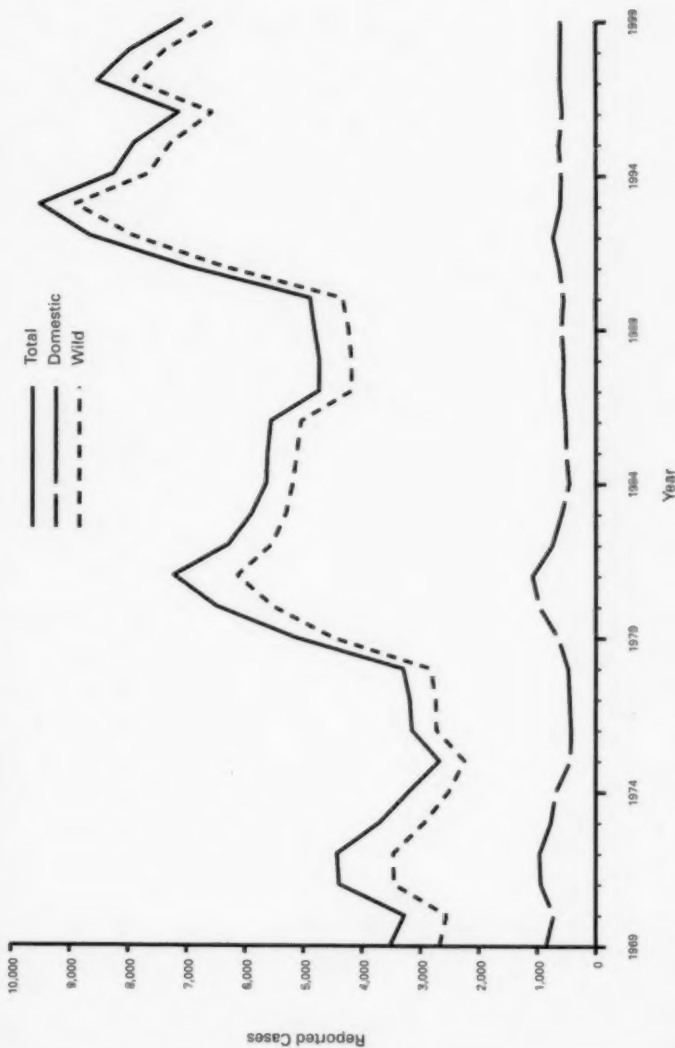
POLIOMYELITIS (paralytic) — reported cases by year, United States, 1969–1999

Data suggest a decline in vaccine-associated paralytic polio (VAPP) since the introduction of a sequential immunization schedule with inactivated poliovirus vaccine (IPV) and live, attenuated oral poliovirus vaccine (OPV) in 1997. This trend is expected to continue with the all-IPV schedule initiated in January 2000. Continued monitoring with additional observation time is required to confirm these preliminary findings because of potential delays in reporting.

PSITTACOSIS — reported cases by year, United States, 1969–1999

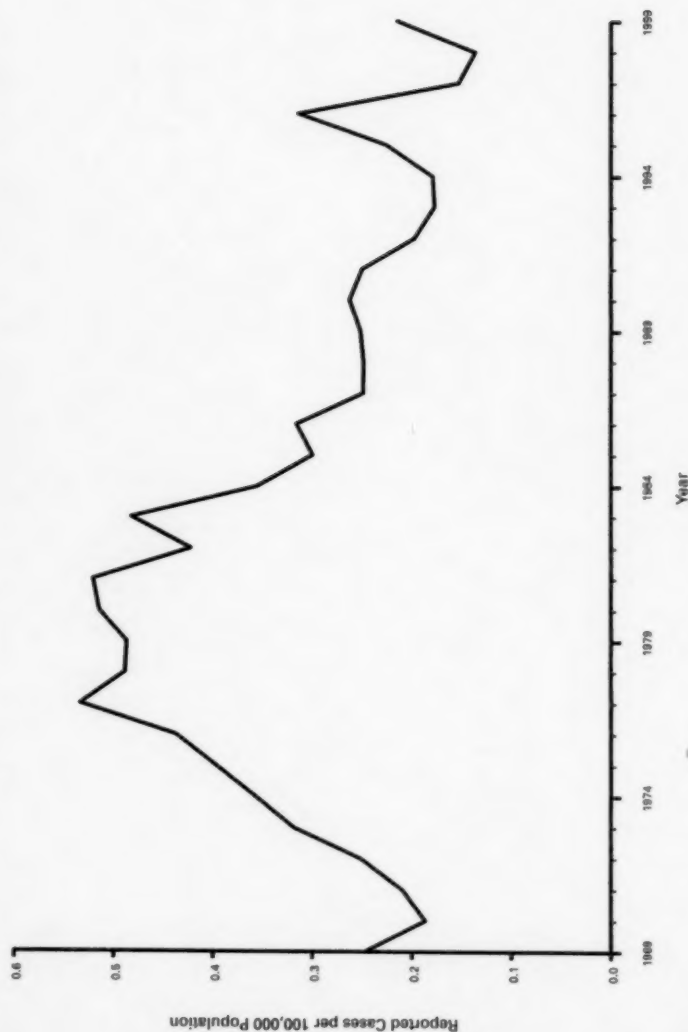
During the 1990s, the number of reported psittacosis cases steadily declined. This decline could reflect both improved diagnostic testing to distinguish *Chlamydia psittaci* from *C. pneumoniae* infections, as well as improved control measures for psittacosis among birds.

RABIES — reported wild and domestic animal cases by year,* United States and Puerto Rico, 1969–1999



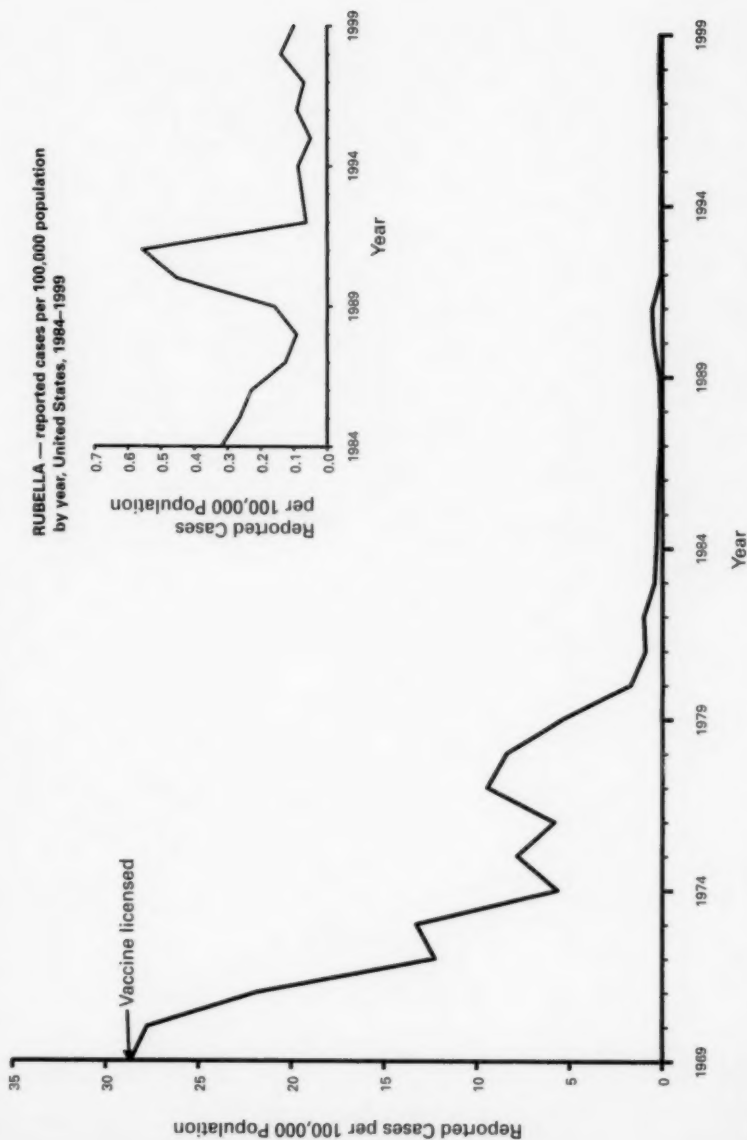
*Data from the National Center for Infectious Diseases.

Periods of resurgence and decline of rabies incidence are primarily the result of cyclic reemergence, mainly among raccoons in the eastern United States. Wildlife populations increase and reach densities sufficient to support epizootic transmission of the disease, resulting in substantial increases in reported cases. As populations are decimated by these epizootics, numbers of reported cases decline until populations again reach levels to support epizootic transmission of the disease.

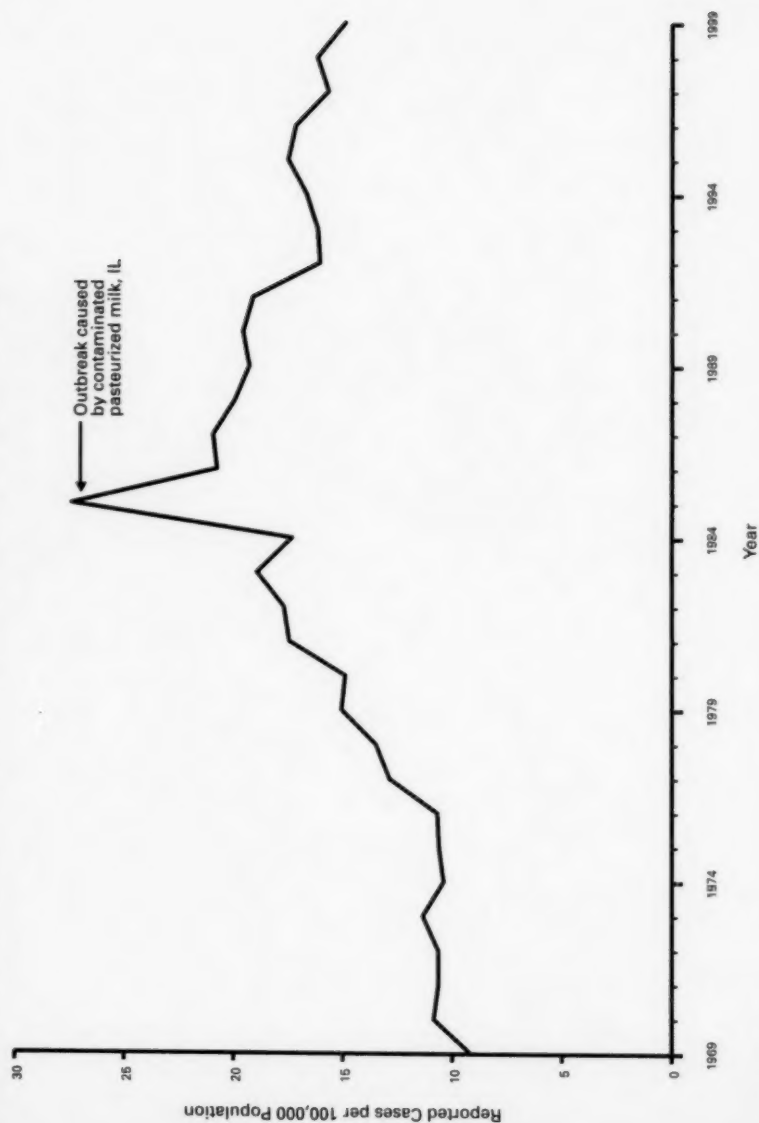
ROCKY MOUNTAIN SPOTTED FEVER — reported cases per 100,000 population by year, United States, 1969–1999

Changes in the number of reported cases of Rocky Mountain spotted fever could reflect alterations to surveillance algorithms for this and other tickborne diseases. Biological factors (e.g., changes in tick populations resulting from fluctuating environmental conditions) also could be involved.

RUBELLA — reported cases per 100,000 population by year, United States, 1969–1999

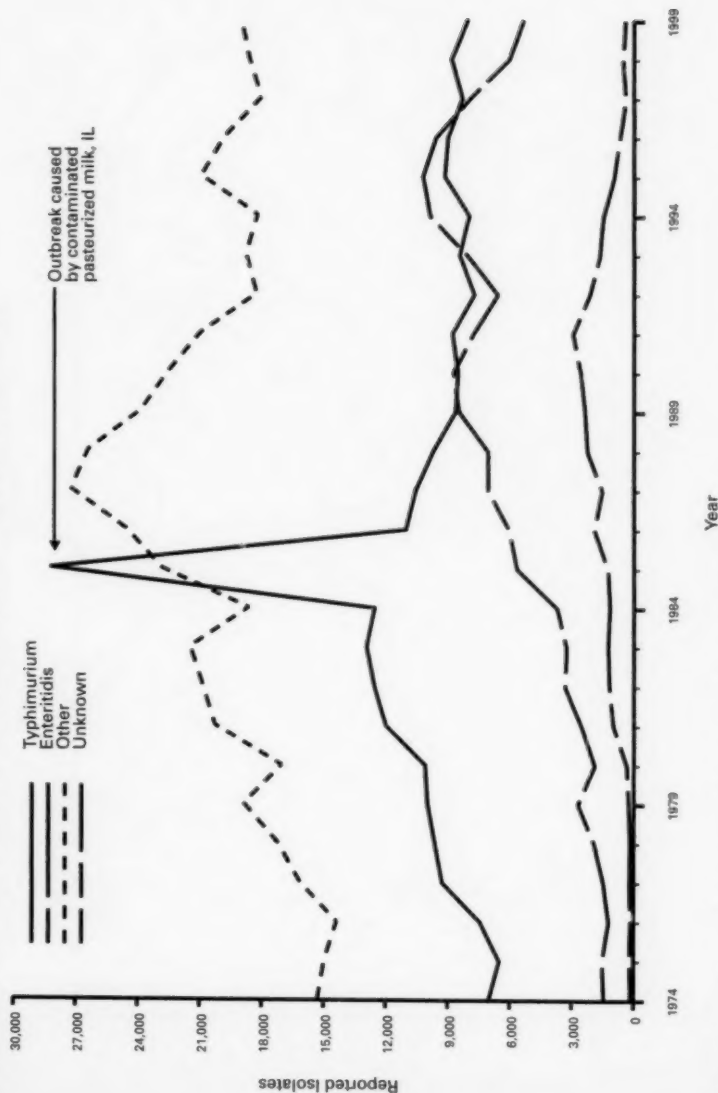


Since 1992, the incidence of rubella has continued to be low. In 1999, approximately 75% of cases occurred among Hispanics aged ≥ 15 years.

SALMONELLOSIS — reported cases per 100,000 population by year, United States, 1969–1999

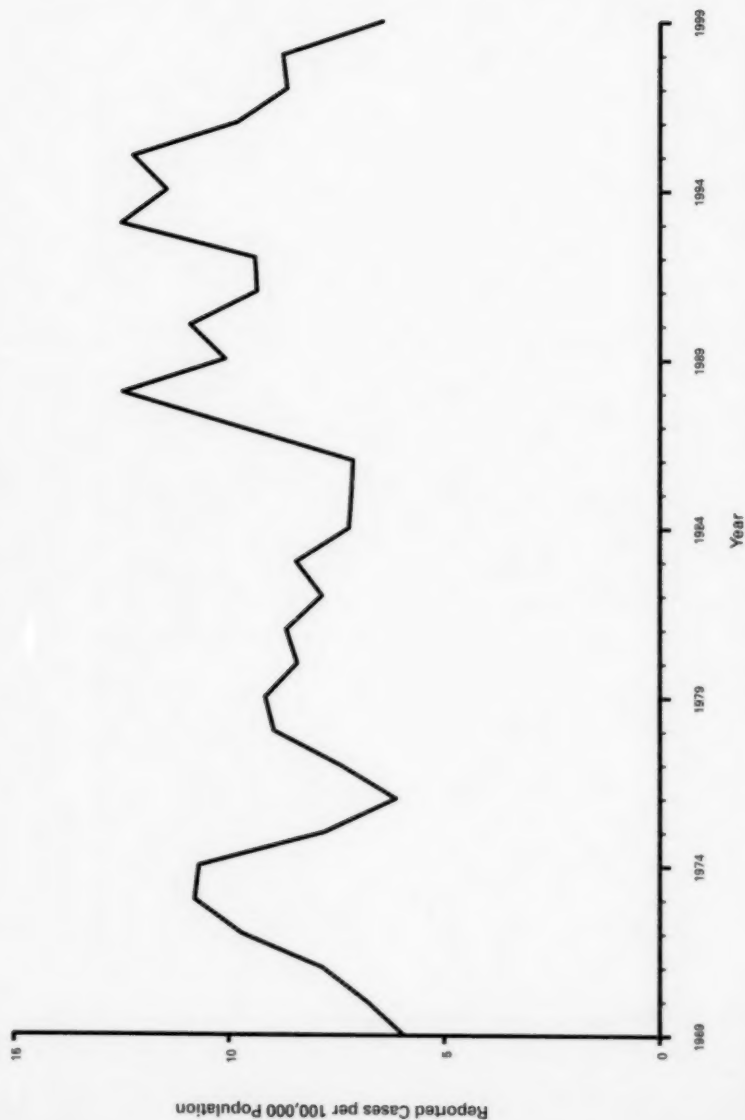
In 1983, *Salmonella* serotypes Typhimurium and Enteritidis accounted for 41% of all reported laboratory-confirmed human salmonellosis cases.

SALMONELLA — reported isolates by serotype and year,* United States, 1974–1999



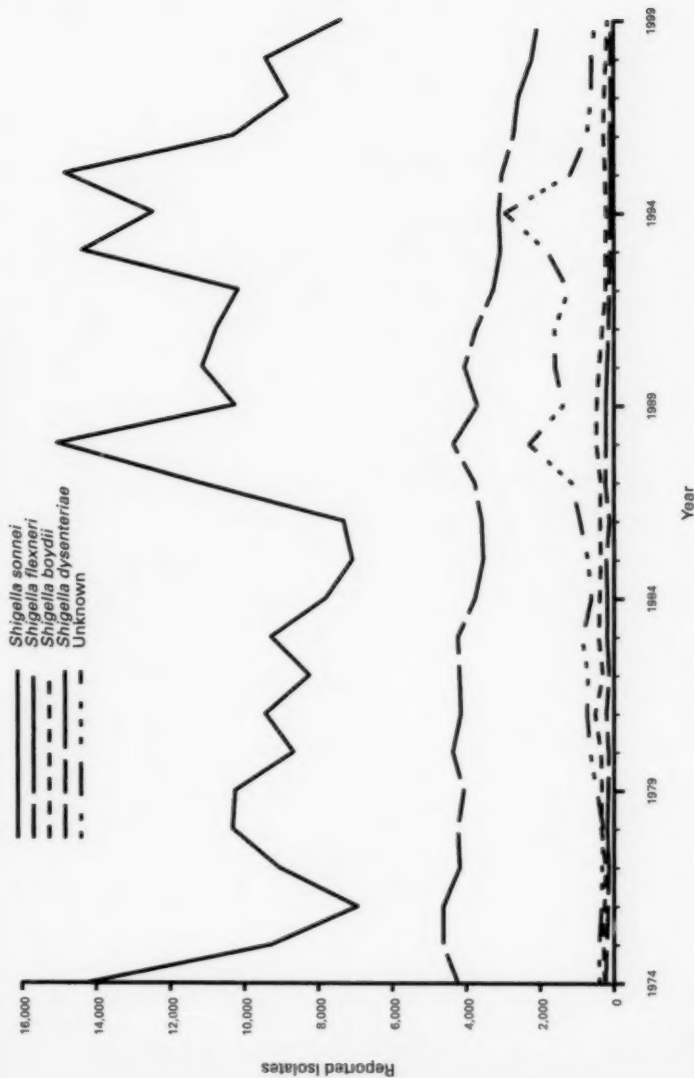
*Data from Public Health Laboratory Information System (PHLIS).

A multiple-resistant strain of *Salmonella* serotype Typhimurium accounts for approximately 30% of the Typhimurium isolates in the United States. The continued decline in *Salmonella* serotype Enteritidis could be associated with expanded farm-to-table control programs.

SHIGELLOSIS — reported cases per 100,000 population by year, United States, 1969–1999

Although the incidence of shigellosis has decreased in recent years, prolonged and extensive *Shigella sonnei* outbreaks continue to occur in child care settings.

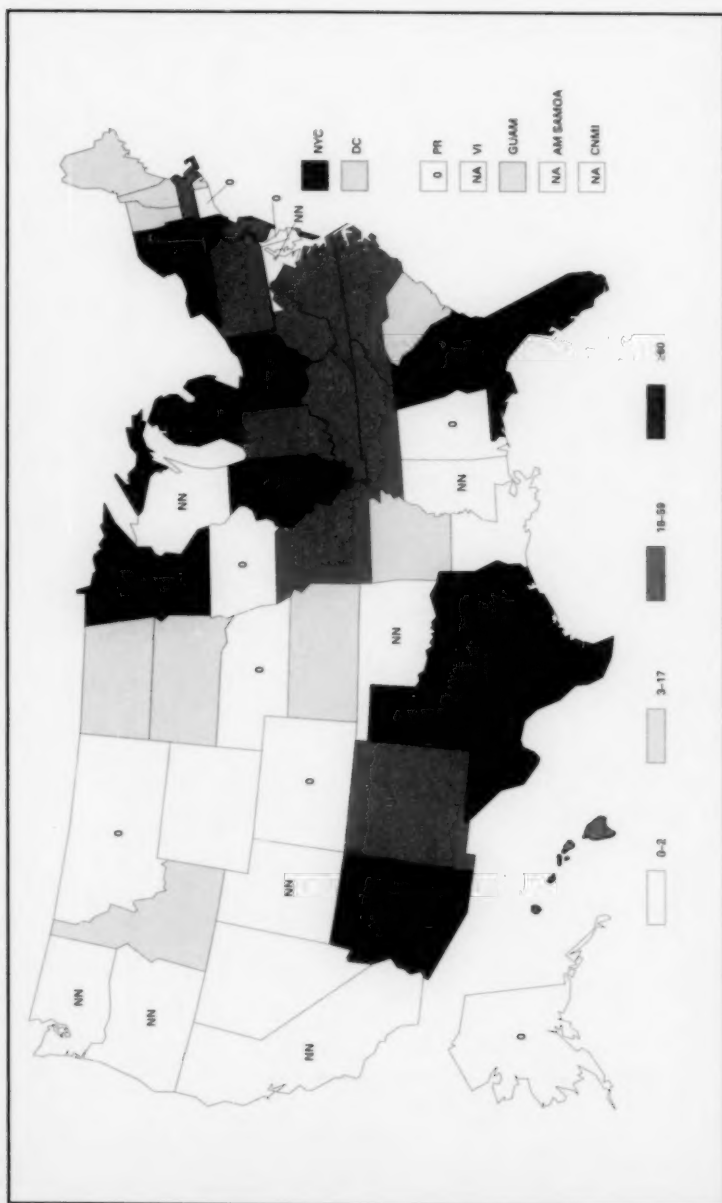
SHIGELLA — reported isolates by species and year,* United States, 1974-1999



*Data from Public Health Laboratory Information System (PHLIS).

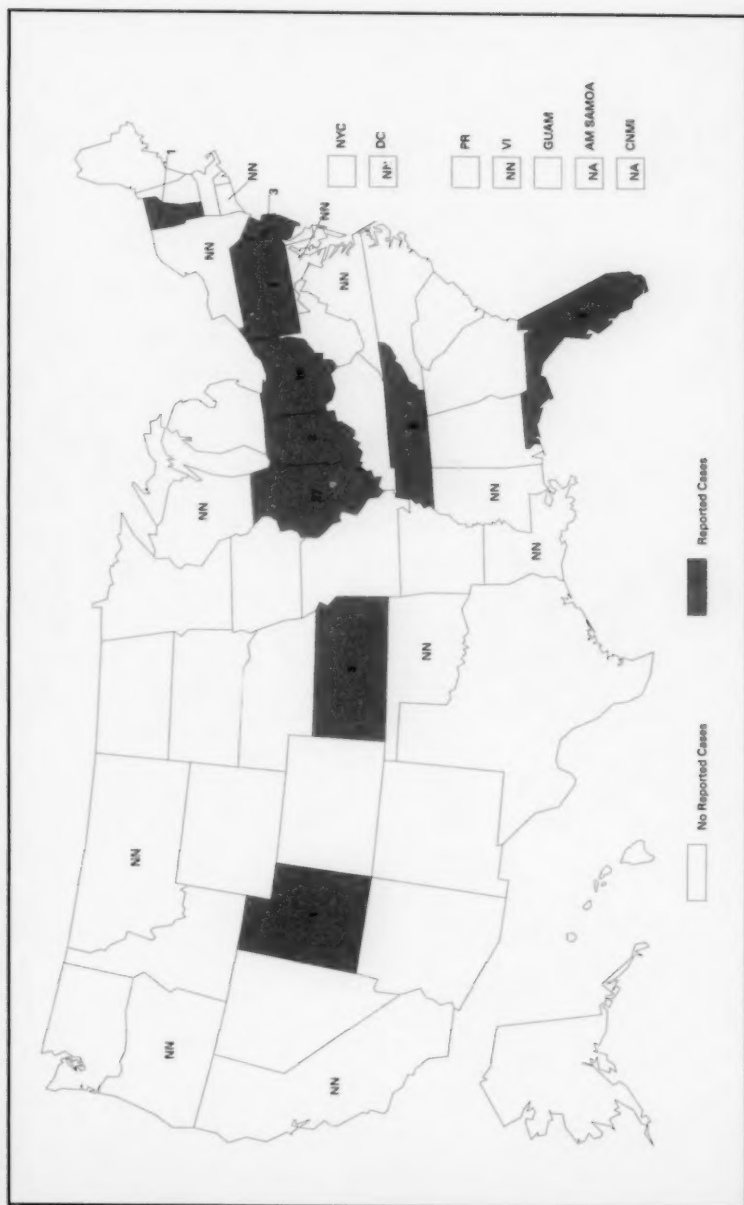
In recent years, reported isolations of *Shigella* have gradually decreased.

STREPTOCOCCAL DISEASE, INVASIVE, GROUP A — reported cases, United States and territories, 1999



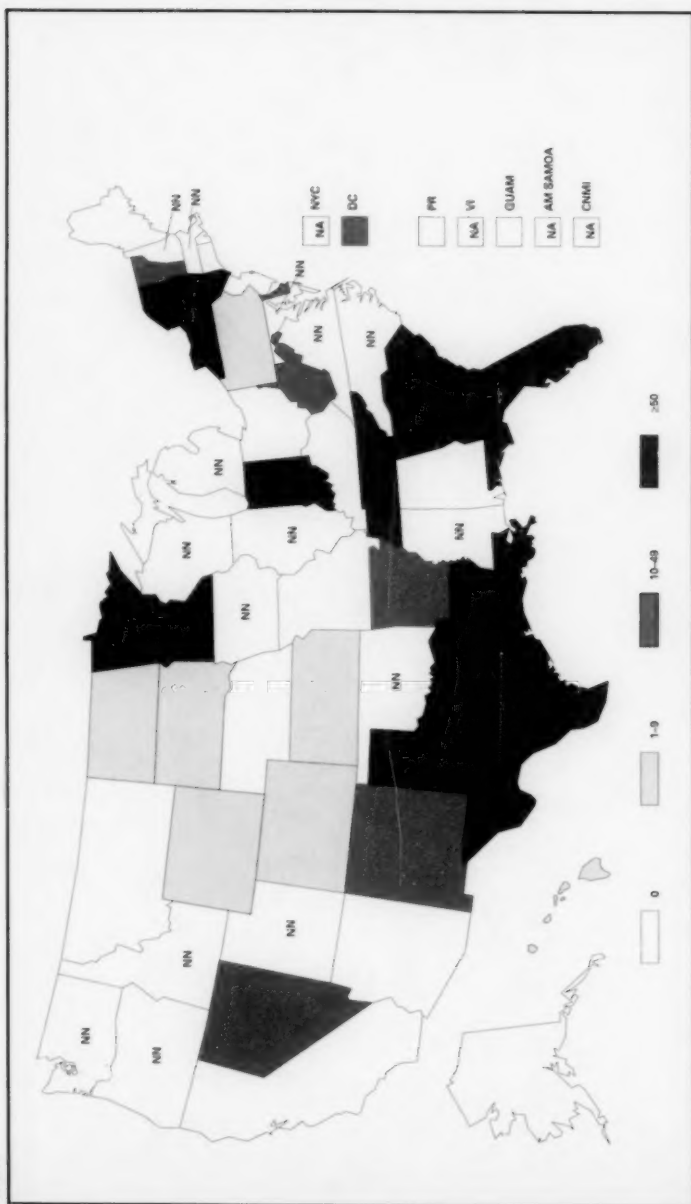
Invasive group A streptococcal disease has been nationally notifiable since 1995. In 1999, a total of 2,382 cases was reported from 38 states, territories, and cities that mandate public health reporting of this condition.

STREPTOCOCCAL TOXIC SHOCK SYNDROME — reported cases, United States and territories, 1999

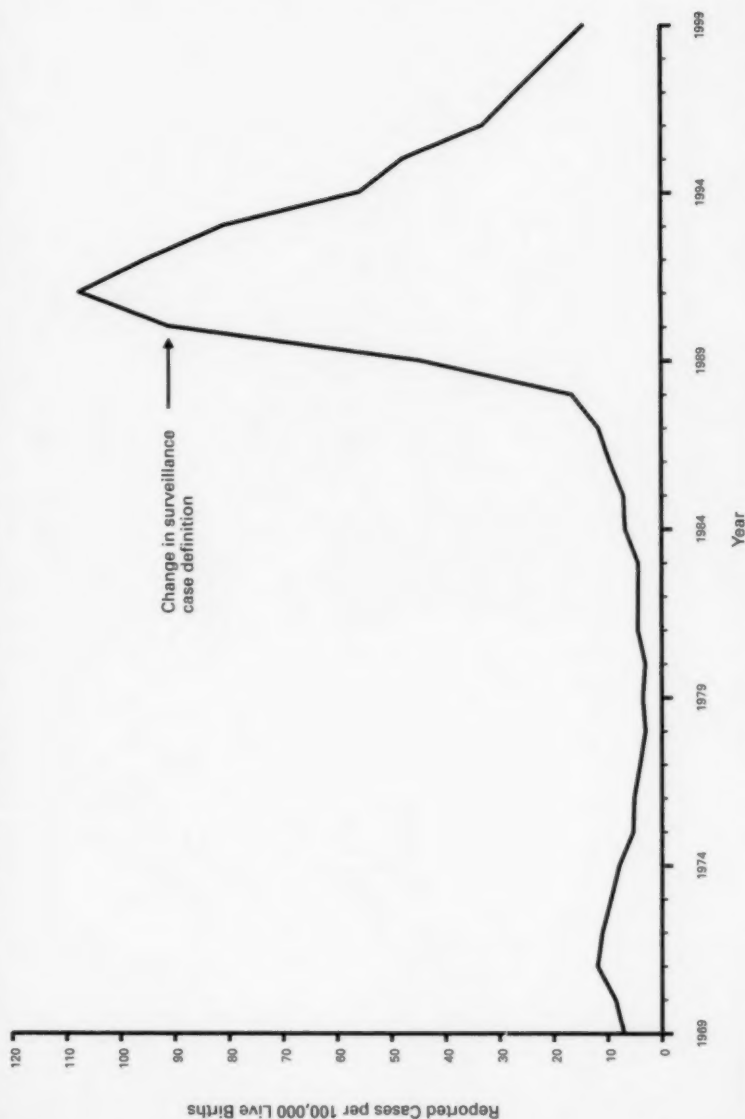


Streptococcal toxic shock syndrome has been nationally notifiable since 1995. In 1999, a total of 61 cases was reported to the National Notifiable Diseases Surveillance System (NNDSS).

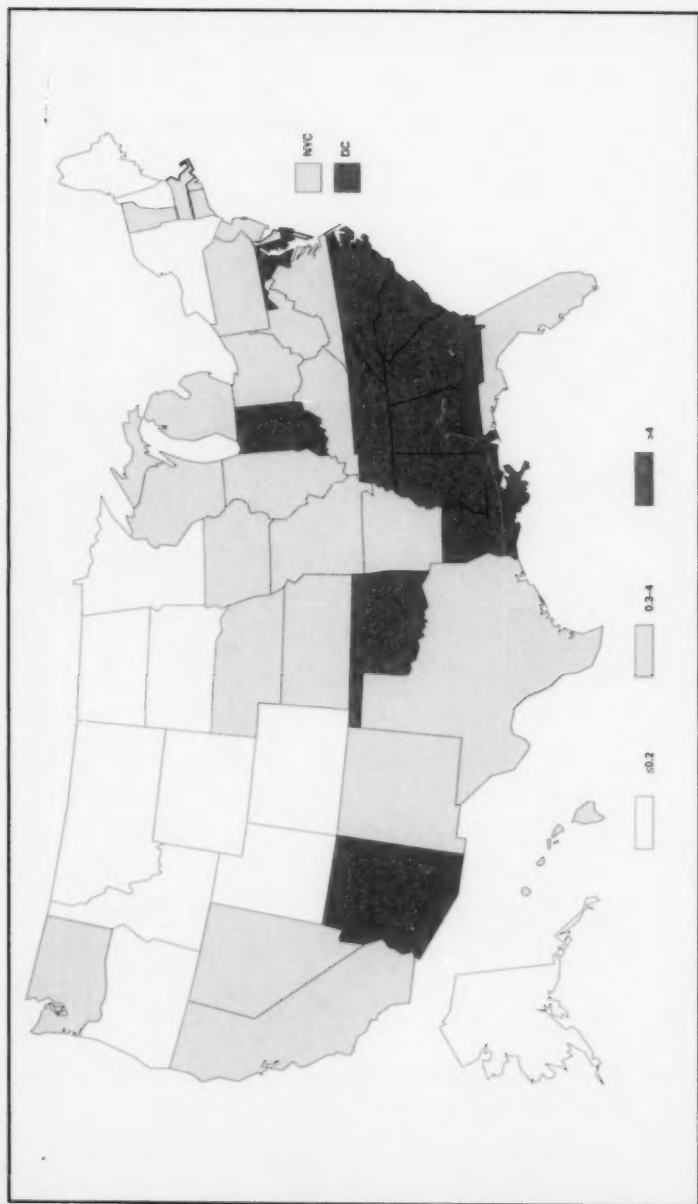
STREPTOCOCCUS PNEUMONIAE, DRUG RESISTANT, INVASIVE DISEASE — reported cases, United States and territories, 1999



In 1999, approximately 60,000 cases of invasive pneumococcal infections occurred in the United States, with one in three cases caused by a strain resistant to at least one antibiotic normally used to treat these infections (Active Bacterial Core Surveillance, National Center for Infectious Diseases). In 2000, a new pneumococcal conjugate vaccine (Prevnar™, marketed by Wyeth Lederle Vaccines) was licensed and recommended for children aged <5 years. This vaccine should reduce the number of pneumococcal infections, including most infections caused by drug-resistant strains.

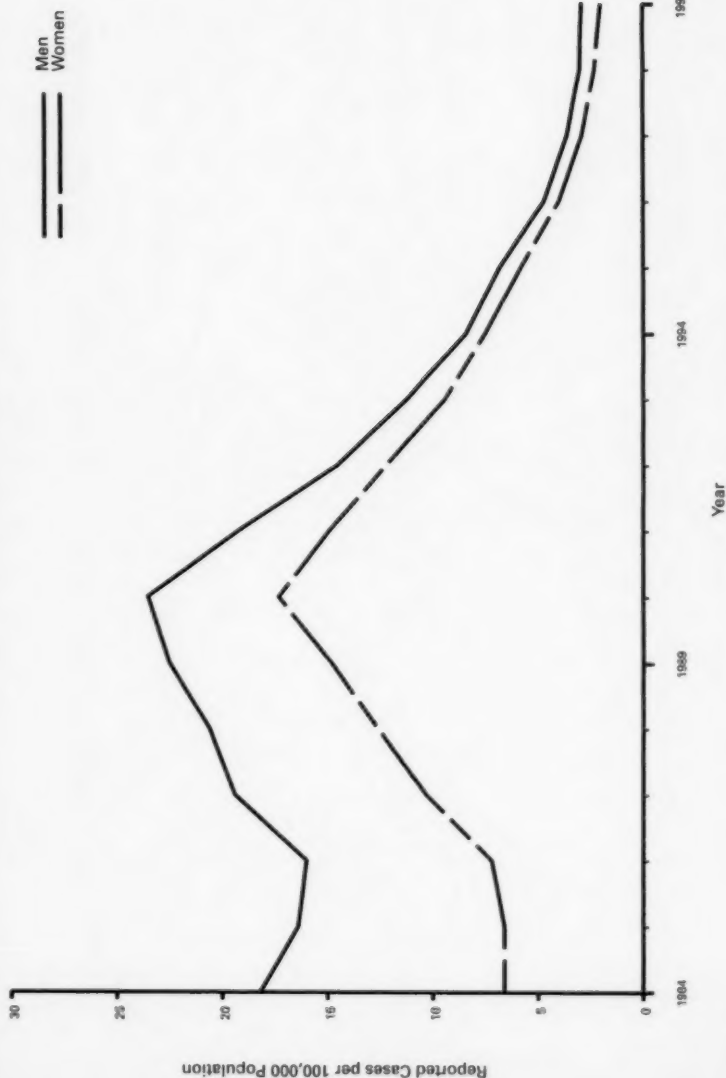
SYPHILIS, CONGENITAL — reported cases per 100,000 live births among infants aged <1 year, United States, 1969–1999

The rate of congenital syphilis decreased from 21.6 cases/100,000 live births in 1998 to 14.3/100,000 in 1999 (Division of Sexually Transmitted Diseases Prevention, National Center for HIV, STD, and TB Prevention).

SYPHILIS, PRIMARY AND SECONDARY — reported cases per 100,000 population, United States, 1999

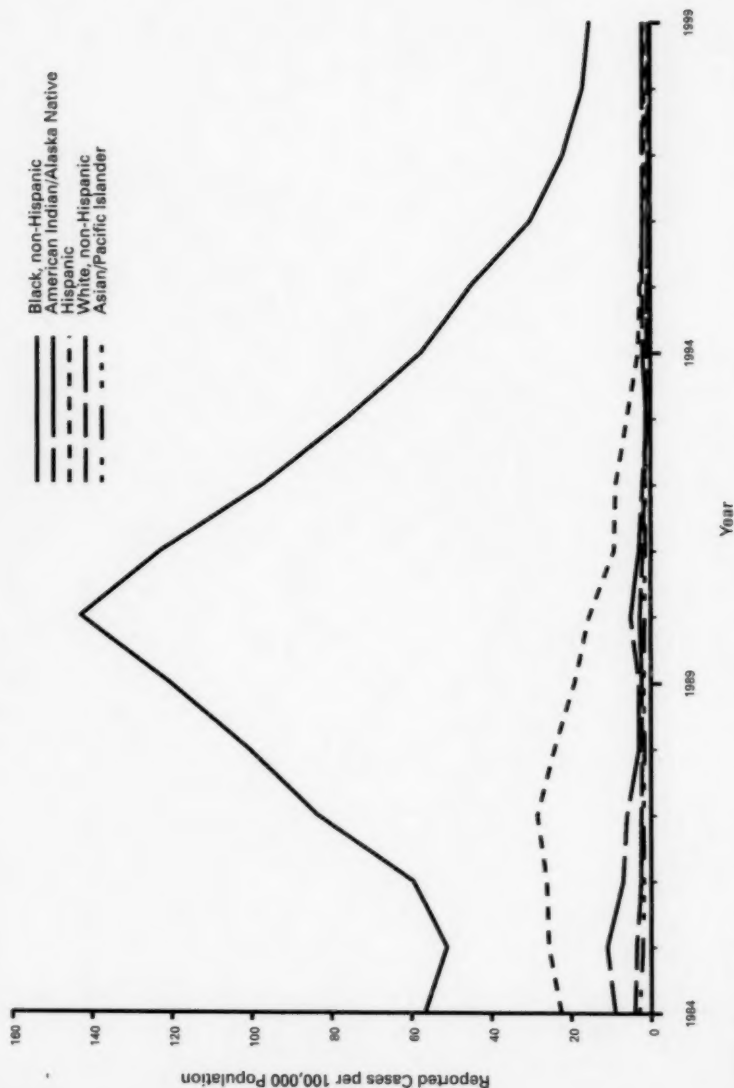
In 1999, the U.S. rate of primary and secondary syphilis was 2.5 cases/100,000 population, which is below the revised *Healthy People 2000* national objective of 4.0 cases/100,000 population. Thirty-nine states reported rates below the national objective, and 14 states reported ≤5 cases.

SYPHILIS, PRIMARY AND SECONDARY — reported cases per 100,000 population by sex, United States, 1984–1999

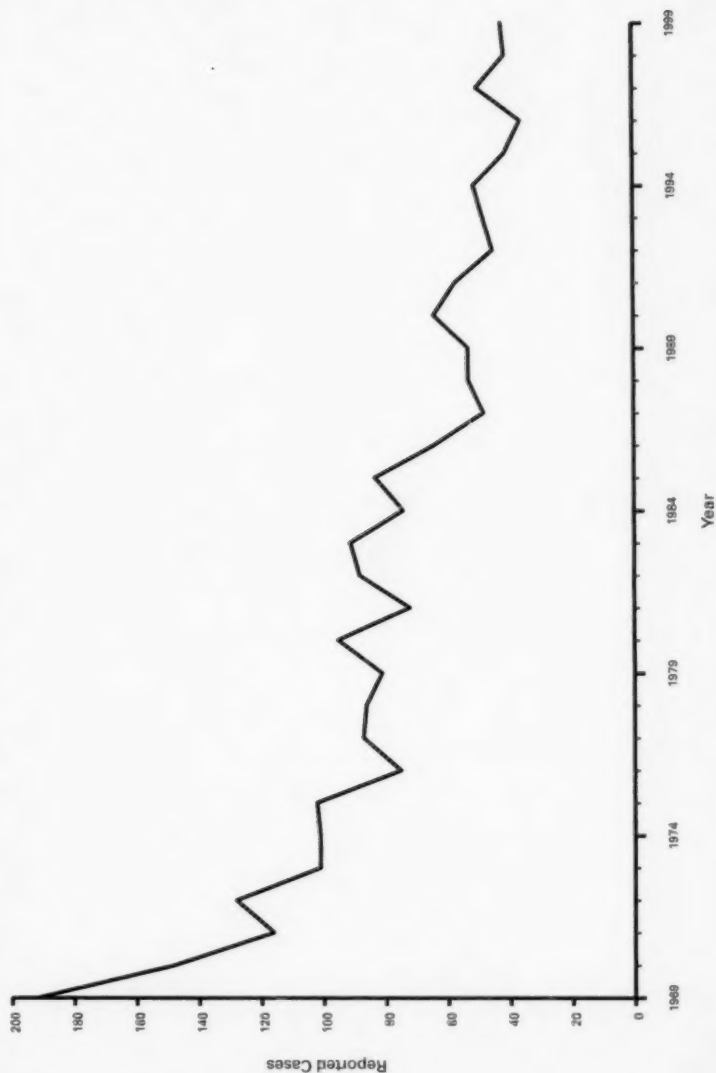


The reported U.S. rate of primary and secondary syphilis continues to decline, with 1999 rates among both males and females below the *Healthy People 2000* national objective of 4.0 cases/100,000 population. Rates decreased from 3.0 cases/100,000 in 1998 to 2.9 in 1999 among men and from 2.2 cases/100,000 in 1998 to 2.0 cases in 1999 among women.

SYPHILIS, PRIMARY AND SECONDARY — reported cases per 100,000 population by race and ethnicity, United States, 1984–1999

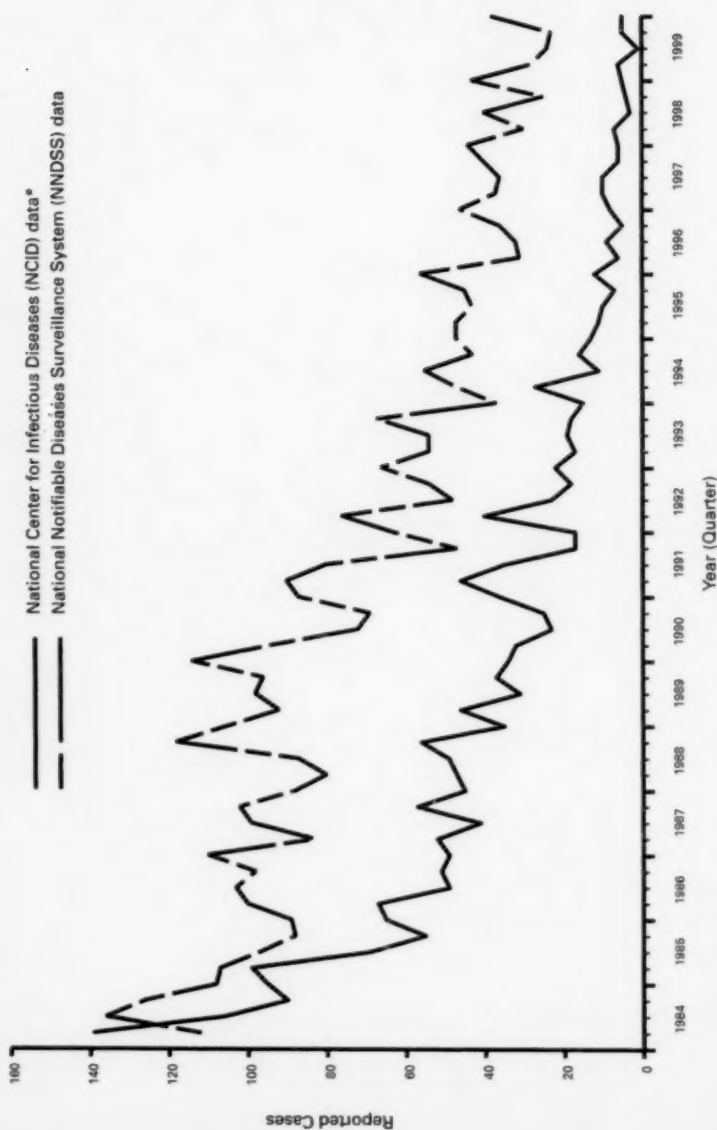


In 1999, primary and secondary syphilis rates declined or remained the same except among Hispanics. The reported rate among non-Hispanic blacks (15.2 cases/100,000 persons) decreased 10% during 1998–1999 but was 30 times greater than the rate among non-Hispanic whites.

TETANUS — reported cases by year, United States, 1969–1999

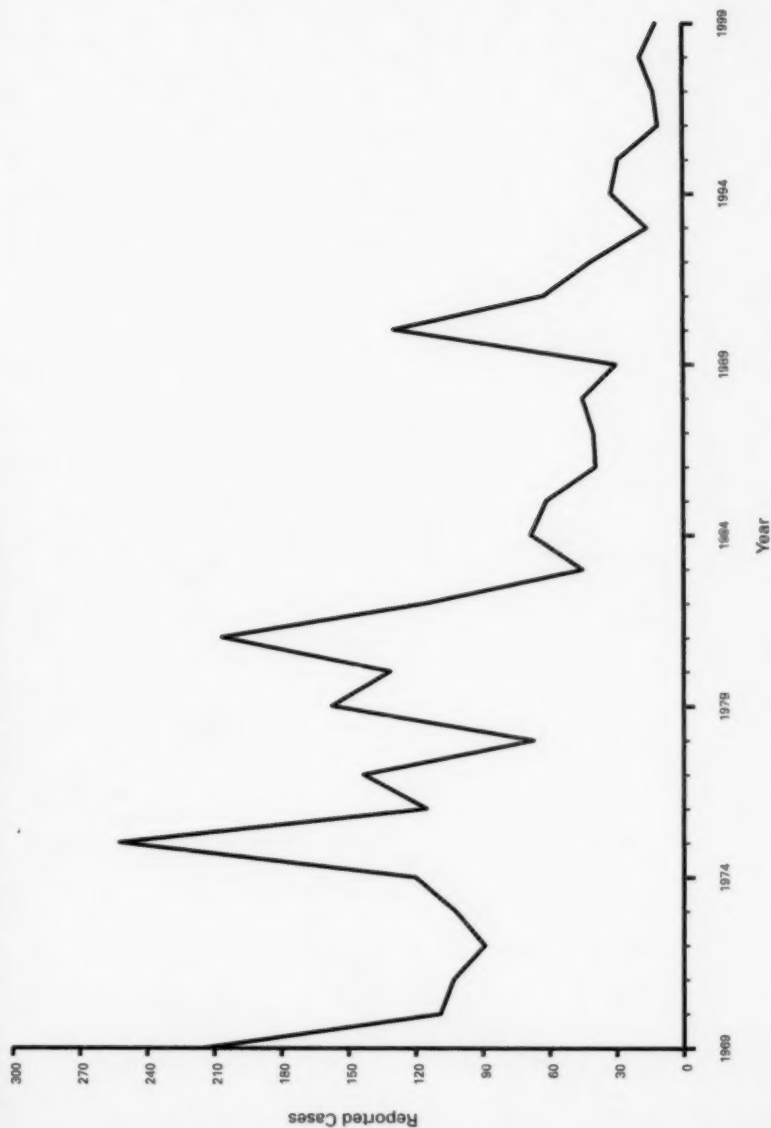
In 1999, a total of 40 cases of tetanus was reported. A shift has occurred in the age distribution of cases, with the percentage of cases among persons aged 25–59 years increasing in the past decade.

TOXIC-SHOCK SYNDROME (TSS) --- reported cases by quarter, United States, 1984-1999



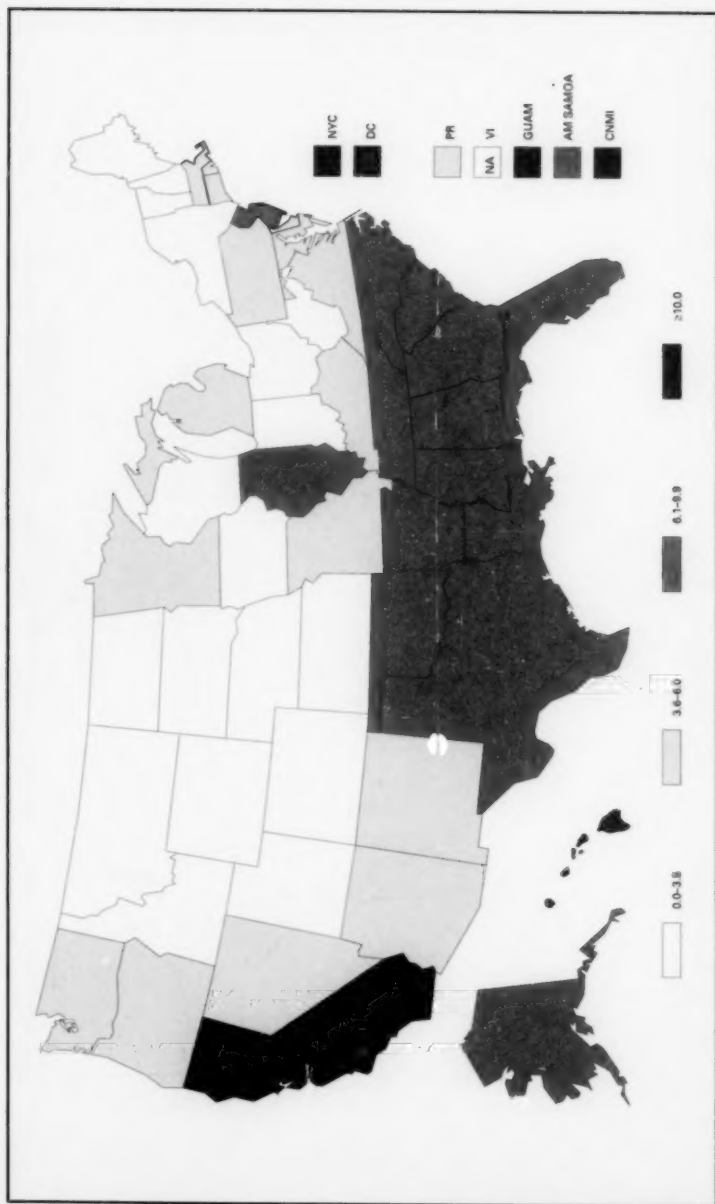
*Includes cases meeting the CDC definition for confirmed and probable cases for staphylococcal TSS.

In 1999, a total of 17 cases of staphylococcal TSS was reported to NCID. Of these cases, nine (53%) persons had menstrual TSS.

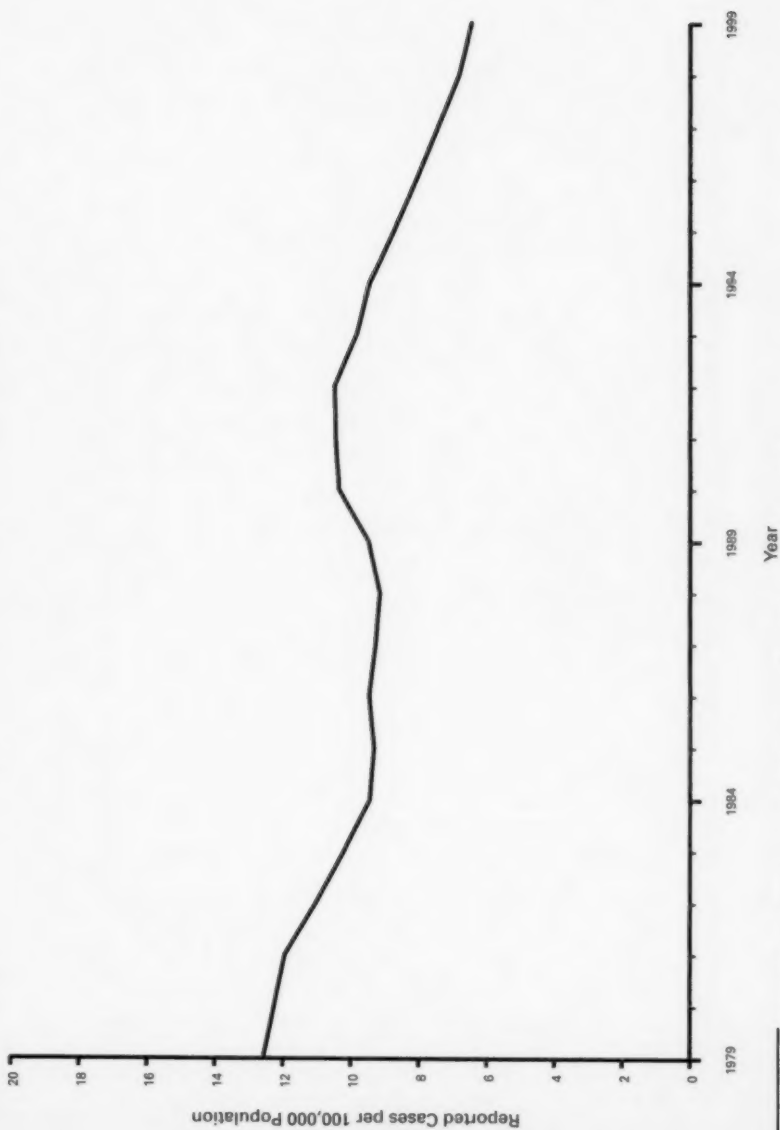
TRICHINOSIS — reported cases by year, United States, 1969–1999

In 1999, a total of 12 cases of trichinosis was reported in the United States. Cases have declined in recent years, with numbers reported at <50 since 1993.

TUBERCULOSIS (TB) — reported cases per 100,000 population, United States and territories, 1999

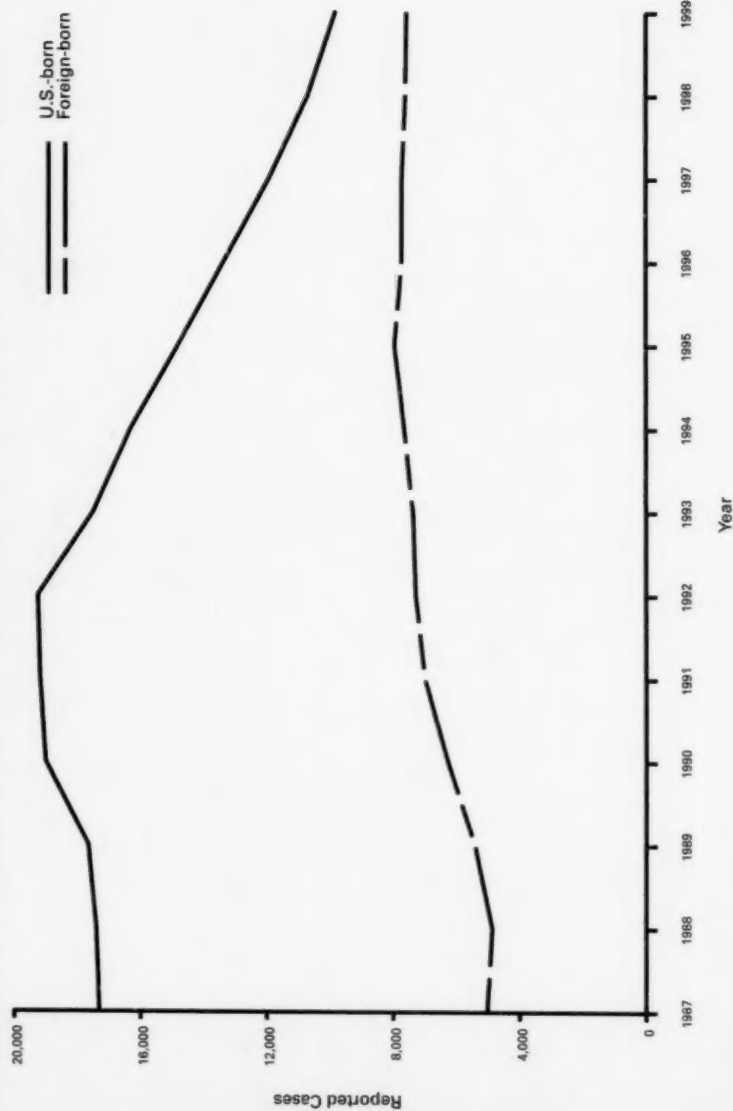


In 1999, a total of 17 states had TB rates of ≤ 3.5 cases/100,000 population, which is the interim (i.e., year 2000) incidence target for the elimination of TB by the year 2010.

TUBERCULOSIS (TB) — reported cases per 100,000 population by year, United States, 1979–1999

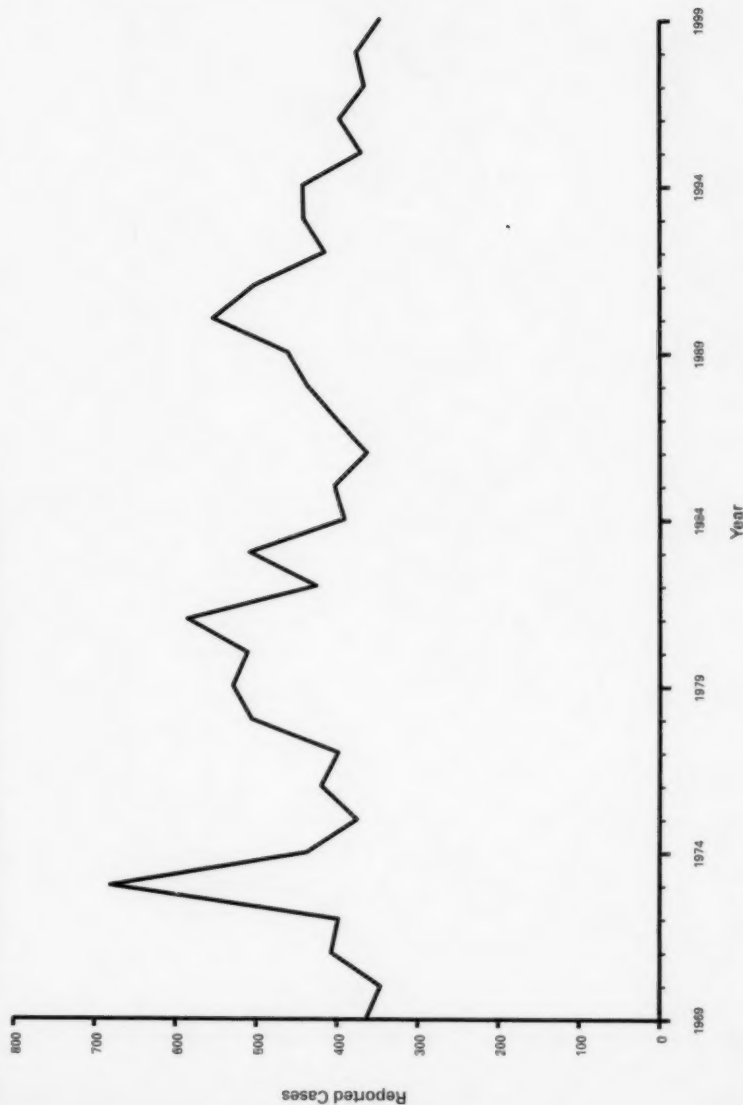
In 1999, a total of 17,531 TB cases was reported to CDC, representing a 4.5% decrease from 1998.

TUBERCULOSIS (TB) — reported cases among U.S.-born and foreign-born persons* by year, United States, 1987–1999

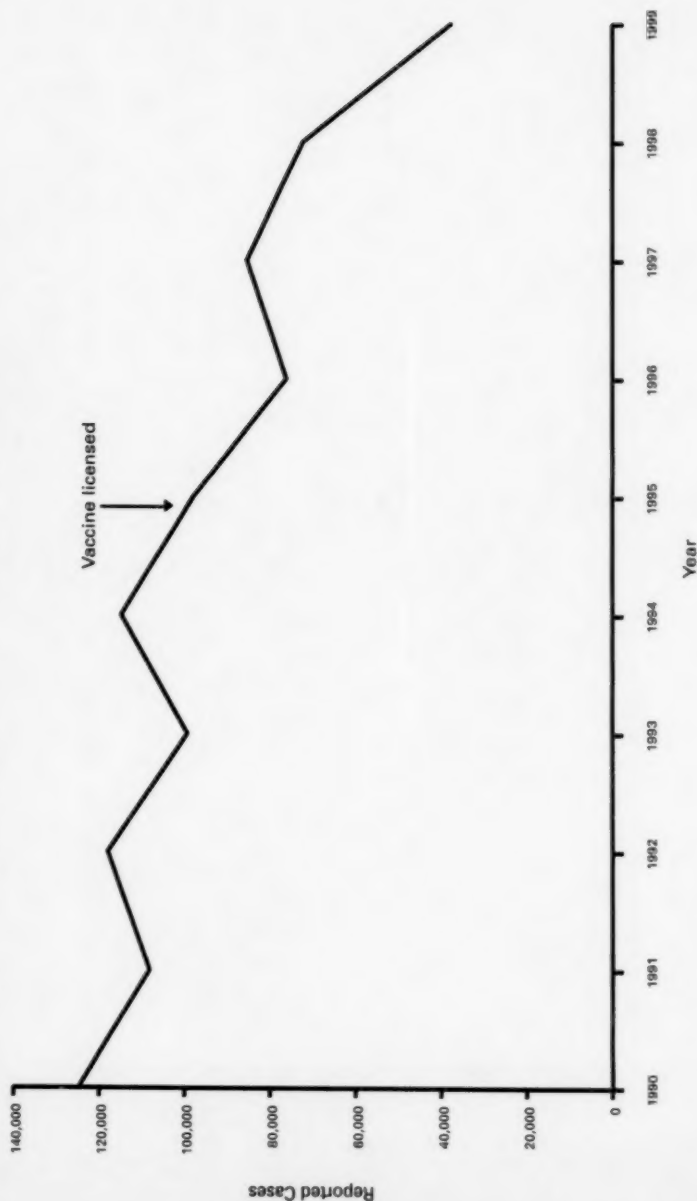


*In 1999, place of birth was unknown for 169 case-patients.

The number of TB cases among foreign-born persons in the United States increased from 22% (4,925 cases) of the total in 1986 to 43% (7,553 cases) of the total in 1999.

TYPHOID FEVER — reported cases by year, United States, 1969–1999

The recent discontinuation of a licensed typhoid fever vaccine and shortages of a second vaccine could cause an increase in preventable cases of typhoid fever among persons traveling internationally.

VARICELLA (Chickenpox) — reported cases from selected U.S. states* (n=7), 1990–1999

*Illinois, Massachusetts, Michigan, Missouri, Rhode Island, Texas, and West Virginia maintained adequate reporting by reporting cases constituting $\geq 5\%$ of their birth cohort during 1990–1995 (National Immunization Program).

PART 3

Historical Summaries of Notifiable Diseases in the United States, 1968-1999

EXPLANATION OF SYMBOLS USED IN TABLES

No reported cases —

TABLE 7. Reported incidence rates of notifiable diseases per 100,000 population, United States, 1989-1999

Disease	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
AIDS*	13.58	16.72	17.32	17.83	40.20	30.07	27.20	25.21	21.95	17.21	16.66
Amebiasis	1.34	1.36	1.23	1.21	1.21	1.20	—	—	—	—	—
Anthrax	—	—	—	—	—	—	—	—	—	—	—
Aspic meningitis	—	4.14	6.26	5.18	5.39	3.71	—	—	—	—	—
Bacterial meningitis (includes wound and unspecified)	0.04	0.04	0.05	0.04	0.04	0.06	0.04	0.05	0.05	0.04	0.06
Foodborne	0.01	0.01	0.01	0.00	0.01	0.02	0.01	0.01	0.02	0.01	0.01
Brucellosis	0.04	0.03	0.04	0.04	0.06	0.05	0.04	0.05	0.04	0.03	0.03
Chancroid	1.90	1.70	1.40	0.90	0.54	0.30	0.20	0.15	0.09	0.07	0.06
Chlamydia†	—	0.00	0.01	—	—	—	182.60	188.10	196.80	236.57	254.10
Cholera	—	—	—	—	0.00	0.02	0.01	—	0.01	0.01	0.01
Cryptosporidiosis	0.00	0.00	0.00	0.00	—	—	—	—	—	—	—
Diphtheria	0.00	0.00	0.00	0.00	—	—	—	—	—	—	—
Encephalitis, primary	0.40	0.54	0.40	0.30	0.36	0.28	0.00	0.01	0.01	0.01	0.02
Postinfectious	0.04	0.04	0.03	0.05	0.07	0.06	—	—	—	—	—
Encephalitis, California serogroup viral	—	—	—	—	—	—	—	—	—	—	—
Stomach	—	—	—	—	—	—	—	—	—	—	—
Stomach equine	—	—	—	—	—	—	—	—	—	—	—
Western equine	—	—	—	—	—	—	—	—	—	—	—
Escherichia coli O157:H7	—	—	—	—	—	—	—	—	—	—	—
Gonorrhea	297.36	276.60	249.48	201.00	172.40	185.40	149.50	122.80	121.40	132.88	133.20
Granuloma inguinale	0.00	0.00	0.01	0.00	0.00	0.00	—	—	—	—	—
Haemophilus influenzae, invasive disease	—	—	—	—	0.55	0.45	0.45	0.46	0.44	0.44	0.48
Hansen disease (leprosy)	0.07	0.08	0.06	0.07	0.07	0.05	0.06	0.05	0.05	0.05	0.04
Hepatitis A	14.20	12.24	10.83	9.31	8.15	7.14	6.12	5.18	4.19	3.80	3.80
Hepatitis B	9.43	8.48	7.14	6.32	5.18	4.81	4.19	4.01	3.80	3.80	2.82
Hepatitis C, non-A, non-B**	1.02	1.03	1.42	2.36	1.86	1.78	1.78	1.41	1.43	1.30	1.14
Hepatitis, unspecified	0.93	0.67	0.50	0.35	0.24	0.17	—	—	—	—	—
Legionellosis	0.48	0.55	0.53	0.53	0.50	0.63	0.48	0.47	0.44	0.51	0.41
Leptospirosis	0.04	0.03	0.02	0.02	0.02	0.02	—	—	—	—	—
Lyme disease	—	—	—	—	3.20	5.01	4.49	6.21	4.79	6.39	5.99
Lymphogranuloma venereum	0.06	0.10	0.19	0.10	0.19	0.10	0.55	0.68	0.75	0.80	0.61
Measles	7.33	11.17	3.82	0.88	0.12	0.37	0.12	0.20	0.06	0.04	0.04
Meningococcal disease	1.10	0.99	0.84	0.84	1.02	1.11	1.25	1.30	1.24	1.01	0.92
Mumps	2.34	2.17	1.72	1.03	0.66	0.60	0.35	0.28	0.27	0.25	0.16
Murine typhus fever	0.02	0.02	0.02	0.02	0.01	0.01	—	—	—	—	—

TABLE 7. (Continued) Reported incidence rates of notifiable diseases per 100,000 population, United States, 1989-1999

Disease	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Pertussis (whooping cough)	1.67	1.34	1.08	1.60	2.55	1.77	1.97	2.54	2.46	2.74	2.67
Polio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00
Poliovirus, paralytic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00
Poliovirus, nonparalytic	0.05	0.05	0.04	0.04	0.02	0.02	0.03	0.02	0.02	0.02	0.01
Poliovirus, total	0.05	0.05	0.04	0.04	0.02	0.02	0.03	0.02	0.02	0.02	0.01
Rabies, human	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00
Rabies, animal	0.13	0.09	0.12	0.06	0.08	0.09	0.09	0.09	0.09	0.14	0.11
Rabies, total	0.13	0.09	0.12	0.06	0.08	0.09	0.09	0.09	0.09	0.14	0.11
Rocky Mountain spotted fever	0.16	0.45	0.56	0.06	0.07	0.08	0.23	0.30	0.07	0.13	0.10
Salmonellosis, excluding typhoid fever	19.26	19.54	19.10	16.04	16.15	16.64	17.66	17.15	15.66	16.17	14.89
Shigellosis	16.07	16.25	17.26	13.70	10.40	11.44	13.42	4.99	4.99	4.99	4.99
Syphilis, primary and secondary	44.94	53.80	51.89	45.30	39.70	32.00	26.20	19.97	17.39	14.19	13.07
Tetanus	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Toxic-shock syndrome	0.16	0.13	0.11	0.10	0.08	0.10	0.07	0.06	0.06	0.06	0.06
Trichinosis	0.01	0.05	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Tuberculosis	9.46	10.33	10.42	10.48	9.92	9.36	8.70	8.04	7.42	6.79	6.43
Typhoid fever	0.06	0.06	0.08	0.08	0.05	0.04	0.11	0.15	0.14	0.14	0.13
Yellow fever	121.71	120.02	135.82	176.94	118.54	135.76	113.11	44.13	93.55	70.28	44.56
Yellow fever, total	—	—	—	—	—	—	—	0.00	—	—	0.00

* Acquired immunodeficiency syndrome (AIDS).

† No longer nationally notifiable.

‡ No longer nationally notifiable.

§ No longer nationally notifiable.

|| Not previously nationally notifiable.

¶ Anti-HCV (hepatitis C virus) antibody test became available May 1990.

** Not nationally notifiable.

*** Rates <0.01 after rounding are listed as 0.00. Data in the MMWR Summary of Notifiable Diseases, United States might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

TABLE 8. Reported cases of notifiable diseases, United States, 1992-1999

Disease*	1992	1993	1994	1995	1996	1997	1998	1999
AIDS	46,472	103,691	76,279	71,347	66,866	58,482	46,521	46,104*
Anthrax	2,542	2,970	2,560	—	—	—	—	—
Asplenic meningitis	12,223	12,848	8,932	—	—	—	—	—
Botulism, total (includes wound and unspecified)	91	97	143	97	119	132	116	154
Foodborne	71	77	80	24	25	31	22	33
Infant	66	66	66	73	60	73	66	82
Brucellosis	106	120	119	96	112	96	79	92
Chancroid	1,886	1,359	773	1,068	940	243	189	143
Chlamydia	—	—	—	477,523	488,886	526,671	604,423	658,721†
Cholera	103	19	39	23	4	6	17	6
Cryptosporidiosis	—	—	—	—	—	2,566	3,793	2,361
Diphtheria	4	—	2	—	2	4	1	1
Encephalitis, primary	774	919	717	—	—	—	—	—
Encephalitis, California serogroup viral	129	170	143	—	—	—	—	—
Eastern equine	—	—	—	—	—	—	97	70
St. Louis	—	—	—	—	—	—	4	5
Western equine	—	—	—	—	—	—	24	4
<i>Escherichia coli</i> O157:H7	—	—	1,420	2,139	2,741	2,555	3,161	4,513
Gonorrhea	501,409	439,673	418,068	392,848	325,863	324,907	355,642	396,076†
Granuloma inguinale	1,412	1,419	1,173	1,180	1,170	1,162	1,194	1,369
Hansen disease, invasive disease	172	187	136	144	112	122	108	108
Hansen disease (leprosy)	23,112	24,238	26,796	31,582	31,032	30,021	23,229	17,047
Hepatitis A	16,126	13,361	12,517	10,806	10,637	10,416	10,258	7,694
Hepatitis B	6,010	4,766	4,470	4,576	3,716	3,816	3,518	3,111
Hepatitis C, non-A, non-B†	884	627	444	—	—	—	—	—
Hepatitis, unspecified	1,339	1,290	1,615	1,241	1,198	1,163	1,365	1,108
Legionellosis	—	—	—	—	—	—	—	—
Leptospirosis	9,896	8,267	13,045	11,700	16,455	12,801	16,801	16,273
Lymphogranuloma venereum	302	295	235	—	—	—	—	—

TABLE 8. (Continued) Reported cases of notifiable diseases, United States, 1992-1999

Disease	1992	1993	1994	1995	1996	1997	1998	1999
Malaria	1,067	1,411	1,229	1,419	1,900	2,001	1,611	1,566
Measles	3,426	3,220	3,220	3,220	3,220	3,220	3,220	3,220
Meningococcal disease	2,134	2,637	2,896	3,243	3,437	3,398	2,791	2,501
Mumps	2,572	1,692	1,537	906	761	683	666	367
Murine typhus fever	28	25	4,617	5,137	7,796	6,564	7,405	7,253
Pertussis (whooping cough)	4,003	6,596	17	7	10	4	9	9
Poliovirus	15	10	17	7	10	5	4	5
Polymyositis, paralytic ¹¹	1	1	1	1	1	1	1	1
Pottacosis	92	60	36	64	42	33	47	16
Rabies, animal	8,589	9,377	8,147	7,811	6,982	8,105	7,259	6,730
Rabies, human	1	3	6	5	3	2	1	—
Rheumatic fever, acute	75	112	112	—	—	—	—	—
Rocky Mountain spotted fever	502	456	465	590	831	409	365	579
Rubella	190	192	277	128	238	181	364	269
Syphilis, congenital syndrome	1	1	1	1	1	1	1	1
Salmonellosis, excluding typhoid fever	40,912	41,641	43,323	45,970	45,471	41,901	43,694	40,596
Shigellosis	23,931	32,198	29,769	32,080	25,978	23,117	23,626	17,521
Syphilis, primary and secondary	33,973	26,488	20,627	16,500	11,367	8,550	6,953	6,657 ¹²
Tetanus	112,581	101,259	81,695	68,953	52,976	46,540	37,977	35,628 ¹³
Toxic-shock syndrome	45	46	51	41	36	50	41	40
Trichinosis	244	212	192	191	145	157	138	113
Typhoid fever	11	16	29	29	11	13	19	12
Tularemia	26,673	25,313	24,361	22,860	21,337	19,651	18,361	17,531 ¹⁴
Typhoid fever	153	132	96	96	—	—	—	—
Varicella (chickenpox) ^{15,16}	414	440	441	369	366	365	376	346
Yellow fever	158,364	134,722	151,219	120,624	83,511	98,727	82,455	46,016

¹ Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP) through December 31, 1999.

² Measles cases reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of August 8, 2000.

³ Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of August 8, 2000.

⁴ Chlamydia refers to genital infections caused by *C. trachomatis*.

⁵ Not previously nationally notifiable.

⁶ Anti-HCV (hepatitis C virus) antibody test was available as of May 1990.

⁷ Numbers might not reflect changes based on retrospective case evaluations or late reports (see *MMWR* 1986;35:180-2).

⁸ Numbers might not reflect changes based on retrospective case evaluations or late reports (see *MMWR* 1986;35:180-2).

⁹ Varicella was taken off the nationally notifiable disease list in 1991. Many states continue to report these cases to CDC.

¹⁰ Last indigenous case of yellow fever reported in 1911; last imported case reported in 1999.

Note: Data in the *MMWR Summary of Notifiable Disease, United States* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

TABLE 9. Reported cases of notifiable diseases, United States, 1994-1991

Disease	1994	1995	1996	1997	1998	1999	2000	2001
AIDS*	4,445	8,349	12,832	21,070	31,001	33,722	41,595	43,672
Amebiasis	5,262	4,433	3,532	3,123	2,990	3,217	3,328	2,969
Anthrax	—	—	—	1	—	—	—	—
Asplenic meningitis	8,308	10,619	11,374	11,467	7,234	10,274	11,562	14,528
Botulism, total (includes wound and unspecified)	123	122	119	124	124	119	122	124
Foodborne	1	4	7	2	2	2	2	1
Infant	1	70	79	59	50	60	65	81
Brucellosis	131	153	106	129	94	95	162	104
Chancroid	665	2,067	3,796	4,996	5,001	4,692	4,212	3,476
Cholera	1	4	23	6	8	—	6	26
Diphtheria	1,257	1,376	—	3	2	3	4	5
Encephalitis, primary	16	11	1,302	1,418	862	961	1,341	1,021
Postinfectious†	878,558	911,419	900,338	780,965	719,335	733,161	690,189	620,476
Gonorrhea	30	44	61	22	11	7	97	29
Granuloma inguinale	40	36	25	25	14	16	16	16
Hansen disease (leprosy)	22,040	23,210	23,430	25,280	28,507	35,821	31,441	24,376
Hepatitis A	26,115	26,611	26,107	25,916	23,177	23,419	21,102	18,003
Hepatitis B	3,871	4,184	3,634	2,959	2,619	2,529	2,553	3,562
Hepatitis C, non-A, non-B	5,531	5,517	3,940	3,102	2,470	2,306	1,671	1,260
Hepatitis, unspecified	750	830	960	1,038	1,065	1,180	1,570	1,377
Legionellosis	—	—	—	—	—	—	—	—
Leptospirosis	40	57	41	43	54	93	77	56
Lymphogranuloma venereum	170	226	366	303	186	189	277	471
Malaria	1,777	1,679	1,743	1,779	1,859	1,897	1,822	1,715
Meningococcal disease	2,597	2,522	2,625	3,965	3,294	16,123	27,286	9,643
Mumps	2,746	2,479	2,594	2,530	2,964	2,727	2,451	2,130
Murine typhus fever	3,021	2,962	7,790	12,948	4,866	5,712	5,262	4,264
Pertussis (whooping cough)	53	37	67	49	54	41	50	43
Poliomyelitis	2,276	3,569	4,195	2,853	3,450	4,157	4,570	2,719

TABLE 9. (Continued) Reported cases of notifiable diseases, United States, 1984-1991

Disease	1984	1985	1986	1987	1988	1989	1990	1991
Plague	31	17	10	12	15	4	2	11
Polymyositis, total	9	8	10	9	1	9	6	10
Poliomyelitis	9	8	10	9	1	9	6	10
Polio	172	119	224	98	114	116	113	94
Polio, animal	5,567	5,565	5,504	4,658	4,651	4,774	4,526	6,910
Rabies, human	3	1	-	1	-	1	1	3
Rabies, animal	117	90	147	141	155	144	108	127
Rheumatic fever, acute	838	714	760	604	609	623	651	638
Rocky Mountain spotted fever	752	630	551	306	225	396	1,125	1,401
Rubella	40,881	65,347	49,944	50,916	48,945	47,812	48,403	48,154
Congenital syndrome	17,371	17,057	17,138	23,880	30,617	25,010	27,077	23,548
Salmonellosis, excluding typhoid fever	28,607	27,131	27,863	35,147	40,117	44,540	50,223	42,935
Shigellosis	69,888	67,563	66,215	66,545	103,437	110,797	134,255	128,569
Syphilis, primary and secondary	74	83	64	48	53	53	64	57
Total, all stages	462	384	412	372	390	400	322	280
Tetanus	68	61	39	40	45	30	129	62
Toxic-shock syndrome	22,255	22,251	22,177	22,517	22,465	23,353	25,711	26,133
Trichinosis	29	177	35	214	201	182	152	181
Tularemia	340	402	362	400	438	460	552	501
Typhoid fever	221,863	178,162	183,243	213,195	192,857	185,441	173,089	147,076
Varicella (chickenpox)								
Yellow fever								

* Acquired immunodeficiency syndrome (AIDS).

† Beginning in 1984, data were recorded by date of report to state health departments. Before 1984, data were recorded by onset date.

‡ Categories other than paralytic are no longer reported.

§ Last indigenous case of yellow fever reported in 1911; before 1998, the last imported case was reported in 1924.

|| Data in the MMWR Summary of Notifiable Disease, United States might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

Note: Data in the MMWR Summary of Notifiable Disease, United States might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

TABLE 10. Reported cases of notifiable diseases, United States, 1976-1983

Disease	1976	1977	1978	1979	1980	1981	1982	1983
Amebiasis	2,906	3,044	3,937	4,107	5,271	6,632	7,304	6,656
Anthrax	2	—	6	—	1	—	—	—
Septic meningitis	3,510	4,789	6,573	8,754	8,028	9,547	9,690	12,695
Bacterial meningitis (includes wound and unspecified)	35	129	106	116	89	103	97	133
Brucellosis	283	283	216	216	103	110	117	210
Chancroid	528	485	521	540	798	860	1,362	847
Cholera	—	3	12	1	—	19	—	1
Diphtheria*	128	84	76	59	3	5	2	5
Encephalitis, primary	1,651	1,414	1,351	1,504	1,362	1,492	1,464	1,761
Postinfectious†	173	119	78	54	43	43	36	34
Gonorrhea	1,001,994	1,022,219	1,013,436	1,004,058	1,004,029	990,564	960,633	900,335
Granuloma inguinale	1	1	2	76	51	66	17	24
Leptospirosis	146	157	162	182	223	250	262	252
Hepatitis A	33,288	31,153	29,500	30,407	29,067	25,802	23,403	21,532
Hepatitis B	14,973	16,631	15,016	15,452	19,015	21,152	21,177	24,318
Hepatitis, unspecified	7,488	8,639	8,776	10,534	11,894	10,975	8,564	7,149
Legionellosis	225	349	353	475	475	468	664	852
Lepidopteros	73	71	110	94	85	68	100	61
Lymphogranuloma venereum	366	348	284	260	199	203	236	335
Malaria	41,170	57,341	26,871	13,597	13,540	17,761	17,761	19,113
Measles	1,605	1,628	2,505	2,724	2,840	3,526	3,056	2,736
Meningococcal disease	36,492	21,436	16,817	14,225	8,576	4,941	5,270	3,365
Mumps	68	75	46	69	81	61	58	62
Murine typhus fever	1,010	2,177	2,093	1,453	1,738	1,243	1,693	2,463
Paratuberculosis	18	19	12	13	18	13	19	14
Poliovirus, total	10	19	8	22	9	10	12	13
Paralytic‡	10	19	8	22	9	10	12	13
Plague	76	94	140	137	124	136	152	142
Rabies, animal	3,073	3,130	3,254	5,119	6,421	7,118	6,212	5,978
Rabies, human	2	1	4	4	—	2	—	2
Rheumatic fever, acute	1,865	1,738	1,851	659	432	794	137	88
Rocky Mountain spotted fever	1,273	1,033	1,010	1,010	1,432	1,012	1,176	1,153
Syphilis	12,491	20,395	18,269	11,705	3,904	2,077	2,375	970
Rubella, congenital syndrome	30	23	30	62	50	19	7	22
Salmonellosis	22,937	27,850	29,410	33,138	37,715	39,940	40,936	44,250
Shigellosis	13,140	16,052	19,511	20,135	19,041	19,859	18,129	19,719
Syphilis, primary and secondary	23,731	20,369	21,555	24,871	27,204	31,268	33,613	32,688
Total, all stages	71,761	64,621	64,875	67,049	66,832	72,799	76,579	74,637
Tetanus	76	87	86	61	95	72	86	91
Tuberculosis	1,153	1,153	1,153	1,153	1,153	1,153	1,153	1,153
Typhoid fever	32,105	30,145	28,521	27,689	27,749	27,373	25,520	23,846
Tularemia	157	165	141	148	234	288	276	310
Typhoid fever	419	368	505	528	510	584	425	507
Varicella (chickenpox)	180,980	188,396	154,069	199,081	190,894	200,766	167,423	177,462
Yellow fever	—	—	—	—	—	—	—	—

* Cutaneous diphtheria is no longer notifiable nationally after 1979.
 † Includes cases reported by health departments. Before 1984, data were recorded by onset date.
 ‡ No cases with paralytic poliomyelitis caused by wild virus have been reported in the United States since 1979.

§ Last indigenous case of yellow fever reported in 1911; last imported case reported in 1959.

Note: Data in the MMWR Summary of Notifiable Disease, United States might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

TABLE 11. Reported cases of notifiable diseases, United States, 1968-1975

Disease	1968	1969	1970	1971	1972	1973	1974	1975
Amebiasis	3,005	2,915	2,385	2,752	2,195	2,255	2,745	2,775
Ascariasis	3	2	2	2	2	2	2	2
Asplenic meningitis	4,494	3,672	6,480	5,176	4,634	4,846	3,197	4,475
Botulism	7	16	12	25	25	34	28	20
Brucellosis	218	226	213	183	196	202	240	310
Chancroid	646	1,104	1,416	1,320	1,414	1,165	946	700
Diphtheria	280	241	435	215	152	228	272	307
Encephalitis, primary	1,701	1,613	1,590	1,524	1,059	1,613	1,164	4,064
Postinfectious	502	304	370	439	243	354	218	227
Gonorrhea	464,543	534,872	600,072	670,268	767,215	842,621	906,121	999,537
Granuloma inguinale	156	154	124	89	81	62	47	60
Hansen disease (leprosy)	123	98	129	131	130	146	118	162
Hepatitis A (infectious)	48,335	48,166	56,729	59,056	54,101	59,056	40,596	38,525
Hepatitis B (infectious)	4,829	5,935	8,310	9,565	8,402	8,461	10,631	13,171
Hepatitis, unspecified	69	88	47	62	41	57	8,361	7,169
Leptospirosis	485	520	612	692	756	406	334	353
Lymphogranuloma venereum	2,317	3,102	3,061	2,375	742	237	283	373
Malaria	22,231	25,626	47,361	75,290	32,275	26,690	22,094	24,374
Measles	2,823	2,951	2,906	2,282	1,323	1,378	1,346	1,478
Meningococcal disease	152,206	90,165	104,235	124,523	74,218	69,612	59,126	58,619
Mumps	36	36	27	23	19	21	26	41
Murine typhus fever	4,810	3,265	4,249	3,038	3,267	1,759	2,402	1,738
Pertussis (whooping cough)	3	5	13	2	2	2	8	20
Plague	53	20	33	21	31	6	7	13
Poliomyelitis, total	53	18	31	17	29	7	7	13
Paratyphoid	43	57	36	32	52	33	164	49
Psittacosis	3,691	3,490	3,224	4,310	4,369	3,640	3,151	2,627
Rabies, animal	1	1	1	1	1	1	1	2
Rabies, human	3,470	3,229	3,277	2,783	2,614	2,560	2,431	2,854
Rheumatic fever, acute	298	488	360	432	523	668	754	844
Rocky Mountain spotted fever	49,371	57,666	56,552	45,068	25,507	27,804	11,917	16,652
Rubella	16,514	18,311	22,691	21,988	22,151	23,816	21,586	30
Rubella, congenital syndrome	12,180	11,948	13,945	16,143	20,207	22,642	22,800	16,594
Scarlet fever	450,013	450,008	433,405	433,405	433,405	433,405	433,405	433,405
Strangococcal sore throat and scarlet fever	19,120	19,120	19,120	19,120	19,120	19,120	19,120	19,120
Syphilis, primary and secondary	92,162	92,162	91,362	55,997	51,149	67,466	63,771	55,551
Tetanus	178	182	146	116	89	101	101	102
Trichinosis	77	215	109	103	89	102	102	252
Tuberculosis ¹	42,623	39,120	37,137	35,217	32,862	30,988	30,122	33,989
Typhoid fever	1,653	1,653	1,653	1,653	1,653	1,653	1,653	1,653
Varicella (chickenpox)	395	364	346	407	386	680	437	375
Yellow fever	164,114	182,927	141,495	154,248

* Not previously notifiable nationally.

* No longer notifiable nationally.

* Case data after 1974 are not comparable with earlier years because of changes in reporting criteria that became effective in 1975.

* Last indigenous case of yellow fever reported in 1911; last imported case reported in 1955.

Note: Data in the MMWR Summary of Notifiable Diseases, United States might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

TABLE 12. Deaths from selected notifiable diseases, United States, 1989-1998

Cause of death	ICD*	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
AIDS [†]	042-044	22,082	25,189	29,555	33,566	37,267	42,114	43,115	31,130	16,516	13,426
Anthrax	022	—	—	—	1	—	—	2	—	—	—
Baculiform, foodborne	005.1	2	4	2	—	—	—	—	1	2	—
Brucellosis	023	—	—	—	—	1	—	—	—	—	—
Cryptosporidiosis	099.0	—	—	—	—	—	—	—	—	—	—
Cholera	001	—	2	2	2	—	1	—	2	—	—
Diphtheria	032	—	1	—	—	—	—	—	—	—	—
Encephalitis, California serogroup viral	062.5	—	—	—	—	—	—	—	—	—	—
Encephalitis, Eastern equine	062.2	1	—	—	—	—	—	—	1	—	—
Encephalitis, Western equine	062.3	—	13	9	2	1	3	6	1	2	—
Encephalitis, unspecified	062.1	—	—	—	—	—	—	—	—	—	—
Gonococcal infections	058	4	3	3	4	5	3	3	4	3	4
<i>Haemophilus influenzae</i> , invasive disease	041.5	16	16	17	16	7	5	12	2	7	11
Hepatitis, viral, unspecified	070.0	88	76	71	82	96	97	142	121	127	114
Hepatitis, viral, infectious (Hep A)	070.0, 070.1	—	—	—	—	—	—	—	—	—	—
Hepatitis, viral, serum (Hep B)	070.2, 070.3	711	816	912	903	1,041	1,120	1,027	1,082	1,030	1,052
Hepatitis, viral, other and unspecified	070.4-070.9	717	693	887	1,016	1,353	1,844	2,231	2,577	2,900	3,630
Measles	044	11	3	4	4	12	3	8	4	7	6
Meningococcal disease	036	32	64	27	4	—	—	—	1	2	—
Mumps	072	3	1	1	2	2	2	1	1	—	—
Peritussis (whooping cough)	033	1	—	—	—	—	—	—	—	—	—
Poliovirus, total	045.0-045.9	—	—	—	—	—	—	—	—	—	—
Polymyositis	020	—	—	—	—	—	—	—	—	—	—
Psittacosis	073	1	2	—	4	1	—	—	1	—	—
Rabies, human	071	1	1	3	1	—	3	3	—	4	—
Rubella	056	4	8	3	1	—	—	—	—	—	—
Syphilis, including	042.1-042.9	99	80	53	47	52	49	66	58	51	37
Shigellosis	004	16	10	10	8	5	13	8	5	5	5
Spotted fevers	082.0	10	20	13	13	5	9	8	6	12	3
Syphilis	090-097	105	115	103	91	80	79	66	73	62	45
Typhoid fever	027	9	11	11	9	11	9	5	1	4	7
Trichinosis	124	1	—	—	—	—	—	—	—	—	—
Tuberculosis (all forms)	010-018	1,970	1,810	1,713	1,705	1,631	1,478	1,336	1,202	1,166	1,112
Typhoid fever	027.0	—	1	1	—	—	124	—	—	—	—
Yellow fever	026	—	—	81	100	100	124	115	81	59	81
Yellow fever (chickenpox) [‡]	080	89	120	—	—	—	—	—	—	—	—

* International Classification of Diseases, Ninth Revision, 1978. Numbers in this column are ICD-9 categories.

† Acquired immunodeficiency syndrome (AIDS). In 1987, the National Center for Health Statistics introduced categories *042-044 for classifying and coding human immunodeficiency virus (HIV) infection. The asterisks are not footnote symbols, but indicate that these codes are not part of ICD-9.

‡ Varicella was taken off the nationally notifiable disease list in 1991. Many states continue to report these cases to CDC.

Note: Data in the annual MMWR Summary of Notifiable Diseases, United States might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of data, or the coding system. Source: National Center for Health Statistics System, 1989-1998. Deaths are classified according to the ICD-9 Data for 1999 are not available at this time.

Selected Reading

General

- Teutsch SM, Churchill RE, eds. Principles and practice of public health surveillance. 2nd ed. New York, NY: Oxford University Press, 2000.
- Chin JE, ed. Control of communicable diseases manual. 17th ed. Washington, DC: American Public Health Association, 2000.
- Effler P, Ching-Lee M, Bogard A, leong M-C, Nekomoto T, Jernigan D. Statewide system of electronic notifiable disease reporting from clinical laboratories: comparing automated reporting with conventional methods. *JAMA* 1999;282:1845-50. Available on the Internet at <<http://jama.ama-assn.org/issues/v282n19/full/joc90534.html>>. Accessed August 3, 2000.
- Roush S, Birkhead G, Koo D, Cobb A, Fleming D. Mandatory reporting of diseases and conditions by health care professionals and laboratories. *JAMA* 1999;282:164-70. Available on the Internet at <<http://jama.ama-assn.org/issues/v282n2/full/joc90413.html>>. Accessed November 21, 2000.
- Koo D, Caldwell B. The role of providers and health plans in infectious disease surveillance. *Eff Clin Pract* 1999;2:247-52. Available on the Internet at <<http://www.acponline.org/journals/ecp/sep0ct99/koo.htm>>. Accessed August 3, 2000.
- CDC. Framework for program evaluation in public health. *MMWR* 1999;48(No. RR-11). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4811.pdf>>. Accessed November 21, 2000.
- CDC. Reporting race and ethnicity data—National Electronic Telecommunications System for Surveillance, 1994-1997. *MMWR* 1999;48:305-12. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4815.pdf>>. Accessed November 21, 2000.
- Niskar AS, Koo D. Differences in notifiable infectious disease morbidity among adult women—United States, 1992-1994. *J Womens Health* 1998;7:451-8.
- CDC. Case definitions for infectious conditions under public health surveillance. *MMWR* 1997;46(No. RR-10). Available on the Internet at <<http://www.cdc.gov/epo/dphsi/casedef/cove97.htm>>. Accessed August 7, 2000.
- CDC. Sexually transmitted disease surveillance 1998. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC, 1999.
- CDC. Manual for the surveillance of vaccine-preventable diseases. Atlanta, GA: CDC, 1999. Available on the Internet at <<http://www.cdc.gov/nip/publications/surv-manual/begin.pdf>>. Accessed August 8, 2000.
- CDC. Demographic differences in notifiable infectious disease morbidity—United States, 1992-1994. *MMWR* 1997;46:637-41. Available on the Internet at <<ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4628.pdf>>. Accessed November 21, 2000.
- CDC. Notifiable disease surveillance and notifiable disease statistics—United States, June 1946 and June 1996. *MMWR* 1996;45:530-6. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4525.pdf>>. Accessed November 21, 2000.
- Koo D, Wetterhall S. History and current status of the National Notifiable Diseases Surveillance System. *J Public Health Manag Pract* 1996;2:4-10.
- CDC. Ten leading nationally notifiable infectious diseases—United States, 1995. *MMWR* 1996;45:883-4. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4541.pdf>>. Accessed November 21, 2000.
- Martin SM, Bean NH. Data management issues for emerging diseases and new tools for managing surveillance and laboratory data. *Emerg Infect Dis* 1995;1:124-8. Available on the Internet at <<http://www.cdc.gov/ncidod/eid/vol1no4/martin2.htm#top>>. Accessed November 21, 2000.
- CDC. Manual of procedures for the reporting of nationally notifiable diseases to CDC. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC, 1995.
- Thacker SB, Stroup DF. Future directions for comprehensive public health surveillance and health information systems in the United States. *Am J Epidemiol* 1994;140:383-97.

- CDC. Use of race and ethnicity in public health surveillance. MMWR 1993;42(No. RR-10). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4210.pdf>>. Accessed November 21, 2000.
- CDC. Proceedings of the 1992 International Symposium on Public Health Surveillance. MMWR 1992;41(suppl).
- CDC. Mandatory reporting of infectious diseases by clinicians and mandatory reporting of occupational diseases by clinicians. MMWR 1990;39(No. RR-9). Available on the Internet at <<http://www.cdc.gov/mmwr/preview/mmwrhtml/00001665.htm>> and <<http://www.cdc.gov/mmwr/preview/mmwrhtml/00001666.htm>>. Accessed November 21, 2000.
- Thacker SB, Choi K, Brachman PS. The surveillance of infectious diseases. JAMA 1983;249:1181-5.

AIDS

- CDC. Guidelines for national human immunodeficiency virus case surveillance, including monitoring for human immunodeficiency virus infection and acquired immunodeficiency syndrome. MMWR 1999;48(RR-13). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4813.pdf>>. Accessed November 21, 2000.
- Hammer SM, Squires KE, Hughes MD, et al. A controlled trial of two nucleoside analogues plus didanosine in persons with human immunodeficiency virus infection and CD4 cell counts of 200 per cubic millimeter or less. AIDS Clinical Trials Group 320 Study Team. N Engl J Med 1997;337:725-33.
- Council of State and Territorial Epidemiologists. CSTE position statement ID-4: National HIV surveillance—addition to the National Public Health Surveillance System. Atlanta, GA: Council of State and Territorial Epidemiologists, 1997. Available on the Internet at <<http://www.cste.org/ps1997/1997-ld-4.doc>>. Accessed October 13, 2000.

Anthrax

- CDC. Surveillance for adverse events associated with anthrax vaccination—U.S. Department of Defense, 1998–2000. MMWR 2000;49:341-5. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4916.pdf>>. Accessed November 21, 2000.
- Turnbull PC, Hugh-Jones ME, Cosivi O. World Health Organization activities on anthrax surveillance and control. J Appl Microbiol 1999;87:318-20.
- Inglesby TV, Henderson DA, Bartlett JG, et al. Anthrax as a biological weapon: medical and public health management [Review]. JAMA 1999;281:1735-44. Available on the Internet at <<http://jama.ama-assn.org/issues/v281n18/full/jst80027.html>>. Accessed November 21, 2000.
- CDC. Bioterrorism alleging use of anthrax and interim guidelines for management—United States, 1998. MMWR 1999;48:69-74. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4804.pdf>>. Accessed November 21, 2000.

Botulism

- Angulo FJ, Getz J, Taylor JP, et al. A large outbreak of botulism: the hazardous baked potato. J Infect Dis 1998;178:172-7.
- CDC. Botulism in the United States, 1899–1996: handbook for epidemiologists, clinicians, and laboratory workers. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC, 1998. Available on the Internet at <<http://www.cdc.gov/ncidod/dbmd/diseaseinfo/botulism.pdf>>. Accessed September 25, 2000.
- Shapiro RL, Hatheway C, Becher J, Sverdlow D. Botulism surveillance and emergence response: a public health strategy for a global challenge. JAMA 1997;278:433-5.

Brucellosis

- Yagupsky P. Detection of brucellae in blood cultures. J Clin Microbiol 1999;37:3437-42.
- CDC. Human exposure to *Brucella abortus* strain RB51—Kansas, 1997. MMWR 1998;47:172-5. Available on the Internet at <ftp.cdc.gov/pub/Publications/mmwr/wk/mm4709.pdf>. Accessed November 21, 2000.
- Chomel BB, DeBess EE, Mangiamale DM, et al. Changing trends in the epidemiology of human brucellosis in California from 1973 to 1992: a shift toward foodborne transmission. J Infect Dis 1994;170:1216-23.
- Taylor JP, Perdue JN. The changing epidemiology of human brucellosis in Texas, 1977–1986. Am J Epidemiol 1989;130:160-5.

Chancroid

- Mertz KJ, Weiss JB, Webb RM, et al. An investigation of genital ulcers in Jackson, Mississippi, with use of a multiplex polymerase chain reaction assay: high prevalence of chancroid and human immunodeficiency virus infection. *J Infect Dis* 1998;178:1060-6.
- Mertz KJ, Trees D, Levine WC, et al. Etiology of genital ulcers and prevalence of human immunodeficiency virus coinfection in 10 U.S. cities. The Genital Ulcer Disease Surveillance Group. *J Infect Dis* 1998;178:1795-8.
- DiCarlo RP, Armentor BS, Martin DH. Chancroid epidemiology in New Orleans men. *J Infect Dis* 1995;172:446-52.
- CDC. Chancroid—United States, 1981–1990: evidence for underreporting of cases. In: CDC surveillance summaries, May 29, 1992. *MMWR* 1992;41(No. SS-3):57-61.

Chlamydia trachomatis. Genital Infection

- CDC. Sexually transmitted disease surveillance 1999 supplement: Chlamydia Prevalence Monitoring Project. Atlanta, GA: US Department of Health and Human Services, CDC, November 2000. Available on the Internet at <http://www.cdc.gov/nchstp/dstd/Stats_Trends/99Chlamydia.htm>. Accessed November 21, 2000.
- Gaydos CA, Howell MR, Pare B, et al. *Chlamydia trachomatis* infections in female military recruits. *N Engl J Med* 1998;339:739-44.
- Mertz KJ, McQuillan GM, Levine WC, et al. A pilot study of chlamydial infection in a national household survey. *Sex Transm Dis* 1998;25:225-8.
- CDC. *Chlamydia trachomatis* genital infections—United States, 1995. *MMWR* 1997;46:193-8. Available on the Internet at <<ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4609.pdf>>. Accessed November 21, 2000.

Cholera

- Ackers ML, Quick RE, Drasbeck CJ, Hutwagner L, Tauxe RV. Are there national risk factors for epidemic cholera? The correlation between socioeconomic and demographic indices and cholera incidence in Latin America. *Int J Epidemiol* 1998;27:330-4.
- Mintz ED, Tauxe RV, Levine MM. The global resurgence of cholera. In: Noah ND, O'Mahony M, eds. Communicable disease epidemiology and control. Chichester, England: John Wiley & Sons, 1998:63-104.
- Mahon BE, Mintz ED, Greene KD, Wells JG, Tauxe RV. Reported cholera in the United States, 1992-1994: a reflection of global changes in cholera epidemiology. *JAMA* 1996;276:307-12.
- Wachsmuth IK, Blake PA, Olsvik O, eds. *Vibrio cholerae* and cholera: molecular to global perspectives. Washington, DC: American Society for Microbiology, 1994.
- World Health Organization. Guidelines for cholera control. Geneva, Switzerland: World Health Organization, 1993.

Cryptosporidiosis

- Kramer MH, Herwaldt BL, Craun GF, Calderon RL, Juranek DD. Surveillance for waterborne-disease outbreaks—United States, 1993-1994. In: CDC surveillance summaries, April 12, 1996. *MMWR* 1996;45(No. SS-1). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/ss/ss4501.pdf>>. Accessed November 21, 2000.
- Juranek DD. Cryptosporidiosis: sources of infection and guidelines for prevention. *Clin Infect Dis* 1995;21(suppl 1):S57-S61. Also available on the Internet at the following site: <<http://www.cdc.gov/ncidod/diseases/crypto/sources.htm>>. Accessed September 27, 2000.
- CDC. Assessing the public health threat associated with waterborne cryptosporidiosis: report of a workshop. *MMWR* 1995;44(No. RR-6). Also available on the Internet at <http://www.cdc.gov/mmwr/preview/ind95_rr.html>. Accessed September 27, 2000.

Cyclosporiasis

- Herwaldt BL, Beach MJ. The return of *Cyclospora* in 1997: another outbreak of cyclosporiasis in North America associated with imported raspberries. Cyclospora Working Group. *Ann Intern Med* 1999;130:210-20.

CDC. Outbreak of cyclosporiasis—Ontario, Canada, May 1998. MMWR 1998;47:806–9. Available on the Internet at <ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4738.pdf>. Accessed November 21, 2000.

Herwaldt BL, Ackers ML. An outbreak in 1996 of cyclosporiasis associated with imported raspberries. The Cyclospora Working Group. N Engl J Med 1997;336:1548–56.

Diphtheria

Bisgard KM, Hardy IR, Popovic T, et al. Respiratory diphtheria in the United States, 1980 through 1995. Am J Public Health 1998;88:787–91.

CDC. Respiratory diphtheria caused by *Corynebacterium ulcerans*—Terre Haute, Indiana, 1996. MMWR 1997;46:330–2. Available on the Internet at <ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4615.pdf>. Accessed November 21, 2000.

Leek MD, Sivaloganathan S, Devaraj SK, Zamiri I, Griffiths GD, Green MA. Diphtheria with a difference—a rare *corynebacterium* fatality with associated apoptotic cell death. Histopathology 1990;16:187–9.

Encephalitis, Arboviral (California Serogroup Viral, Eastern Equine, St. Louis, and Western Equine)

Jones TF, Craig AS, Nasci RS, et al. Newly recognized focus of La Crosse encephalitis in Tennessee. Clin Infect Dis 1999;28:93–7.

CDC. Arboviral infections of the central nervous system—United States, 1996–1997. MMWR 1998;47:517–22. Available on the Internet at <ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4725.pdf>. Accessed November 21, 2000.

Szumlas DE, Apperson CS, Hartig PC, Francy DB, Karabatsos N. Seroepidemiology of La Crosse virus infection in humans in western North Carolina. Am J Trop Med Hyg 1996;54:332–7.

Marfin AA, Bleed DM, Lofgren JP, et al. Epidemiologic aspects of a St. Louis encephalitis epidemic in Jefferson County, Arkansas, 1991. Am J Trop Med Hyg 1993;49:30–7.

Escherichia coli O157:H7; Hemolytic Uremic Syndrome, Postdiarrheal

CDC. PulseNet. The National Molecular Subtyping Network for Foodborne Disease Surveillance. Available on the Internet at <http://www.cdc.gov/ncidod/dbmd/pulsenet/pulsenet.htm>. Accessed August 30, 2000.

Bender JB, Hedberg CW, Besser JM, Boxrud DJ, MacDonald KL, Osterholm MT. Surveillance for *Escherichia coli* O157:H7 infections in Minnesota by molecular subtyping. N Engl J Med 1997;337:388–94.

Mahon BE, Griffin PM, Mead PS, Tauxe RV. Hemolytic uremic syndrome surveillance to monitor trends in infection with *Escherichia coli* O157:H7 and other shiga toxin-producing *E. coli*. Emerg Infect Dis 1997;3:409–12. Available on the Internet at <http://www.cdc.gov/ncidod/eid/vol3no3/letters.htm#mahon>. Accessed November 21, 2000.

Slutsker L, Ries AA, Greene KD, Wells JG, Hutwagner L, Griffin PM. *Escherichia coli* O157:H7 diarrhea in the United States: clinical and epidemiologic features. Ann Intern Med 1997;126:505–13.

Ehrlichiosis (Human Granulocytic and Human Monocytic)

Ijdo JW, Meek JI, Cartter ML, et al. The emergence of another tickborne infection in the 12-town area around Lyme, Connecticut: human granulocytic ehrlichiosis. J Infect Dis 2000;181:1388–93.

McQuiston JH, Paddock CD, Holman RC, Childs JE. The human ehrlichioses in the United States [Review]. Emerg Infect Dis 1999;5:635–42. Available on the Internet at <http://www.cdc.gov/ncidod/eid/vol5no5/mcquiston.htm>. Accessed November 21, 2000.

Childs JE, Sumner JW, Nicholson WL, Massung RF, Standaert SM, Paddock CD. Outcome of diagnostic tests using samples from patients with culture-proven human monocytic ehrlichiosis: implications for surveillance. J Clin Microbiol 1999;37:2997–3000.

Gonorrhea

- CDC. Sexually transmitted diseases surveillance 1999 supplement: Gonococcal Isolate Surveillance Project (GISP) annual report—1999. Atlanta, GA: US Department of Health and Human Services, CDC, November 2000. Available on the Internet at <http://www.cdc.gov/nchstp/dstd/Stats_Trends/99GISP.htm>. Accessed November 21, 2000.
- CDC. Gonorrhea—United States, 1998. MMWR 2000;49:538–42. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4924.pdf>>. Accessed November 21, 2000.
- CDC. Increases in unsafe sex and rectal gonorrhea among men who have sex with men—San Francisco, California, 1994–1997. MMWR 1999;48:45–8. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4803.pdf>>. Accessed November 21, 2000.

Haemophilus influenzae, Invasive Disease

- Galil K, Singleton R, Levine OS, et al. Reemergence of invasive *Haemophilus influenzae* type b disease in a well-vaccinated population in remote Alaska. J Infect Dis 1999;179:101–6.
- Bisgard KM, Kao A, Leake J, Strebel PM, Perkins BA, Wharton M. *Haemophilus influenzae* invasive disease in the United States, 1994–1995: near disappearance of a vaccine-preventable childhood disease. Emerg Infect Dis 1998;2:229–37. Available on the Internet at <<http://www.cdc.gov/ncidod/eid/vol4no2/bisgard.htm>>. Accessed November 21, 2000.
- CDC. Progress toward eliminating *Haemophilus influenzae* type b disease among infants and children—United States, 1987–1997. MMWR 1998;47:993–8. Available on the Internet at <<ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4746.pdf>>. Accessed November 21, 2000.
- CDC. Recommendations for use of *Haemophilus b* conjugate vaccines and a combined diphtheria, tetanus, pertussis, and *Haemophilus b* vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1993;42(No. RR-13). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4213.pdf>>. Accessed November 21, 2000.

Hantavirus Pulmonary Syndrome

- CDC. Hantavirus Pulmonary Syndrome—Panama, 1999–2000. MMWR 2000;49:205–7. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4910.pdf>>. Accessed November 21, 2000.
- Kitsutani PI, Denton RW, Fritz CL, et al. Acute Sin Nombre hantavirus infection without pulmonary syndrome, United States. Emerg Infect Dis 1999;5:701–5. Available on the Internet at <<http://www.cdc.gov/ncidod/eid/vol5no5/kitsutani.htm>>. Accessed November 21, 2000.
- Monroe MC, Morzunov SP, Johnson AM, et al. Genetic diversity and distribution of *Peromyscus*-borne hantaviruses in North America. Emerg Infect Dis 1999;5:75–86. Available on the Internet at <<http://www.cdc.gov/ncidod/eid/vol5no1/monroe.htm>>. Accessed November 21, 2000.
- Zavasky D-M, Hjelle B, Peterson M, et al. Acute infection with Sin Nombre hantavirus without pulmonary edema. Clin Infect Dis 1999;29:664–6.

Hepatitis A

- CDC. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-12). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4812.pdf>>. Accessed November 21, 2000.
- Bell BP, Shapiro CN, Alter MJ, et al. The diverse patterns of hepatitis A epidemiology in the United States—implications for vaccination strategies. J Infect Dis 1998;178:1579–84.
- Lemon SM, Shapiro CN. The value of immunization against hepatitis A. Infect Agents Dis 1994;3:38–49.
- Shapiro CN, Coleman PJ, McQuillan GM, Alter MJ, Margolis HS. Epidemiology of hepatitis A: seroepidemiology and risk groups in the USA. Vaccine 1992;10(suppl 1):S59–S62.

Hepatitis B

- McQuillan GM, Coleman PJ, Kruszon-Moran D, Moyer LA, Lambert SB, Margolis HS. Prevalence of hepatitis B virus infection in the United States: The National Health and Nutrition Examination Surveys, 1976 through 1994. *Am J Pub Health* 1999;89:14-8.
- Coleman PJ, McQuillan GM, Moyer LA, Lambert SB, Margolis HS. Incidence of hepatitis B virus infection in the United States, 1976-1994: estimates from the National Health and Nutrition Examination Surveys. *J Infect Dis* 1998;178:954-9.
- Margolis HS, Alter MJ, Hadler SC. Hepatitis B: evolving epidemiology and implications for control [Review]. *Semin Liver Dis* 1991;11:84-92.
- CDC. Hepatitis B virus: a comprehensive strategy for eliminating transmission in the United States through universal childhood vaccination: recommendations of the Immunization Practices Advisory Committee (ACIP). *MMWR* 1991;40(No. RR-13):1-19. Available on the Internet at <<http://www.cdc.gov/mmwr/preview/mmwrhtml/00033405.htm>>. Accessed November 21, 2000.

Hepatitis C; Non-A, Non-B

- Alter MJ, Kruszon-Moran D, Nainan OV, et al. The prevalence of hepatitis C virus infection in the United States, 1988 through 1994. *N Engl J Med* 1999;341:556-62.
- CDC. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. *MMWR* 1998;47(No. RR-19). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4719.pdf>>. Accessed November 21, 2000.

HIV Infection, Adult and Pediatric

- CDC. Guidelines for national human immunodeficiency virus case surveillance, including monitoring for human immunodeficiency virus infection and acquired immunodeficiency syndrome. *MMWR* 1999;48(No. RR-13). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4813.pdf>>. Accessed November 21, 2000.
- Lindegren ML, Byers RH, Jr., Thomas P, et al. Trends in perinatal transmission of HIV/AIDS in the United States. *JAMA* 1999;282:531-8. Available on the Internet at <<http://jama.ama-assn.org/issues/v282n6/rfull/joc81248.html>>. Accessed November 21, 2000.
- CDC. HIV/AIDS surveillance report, 1999;11(No. 2). Available on the Internet at <<http://www.cdc.gov/hiv/stats/hasr1102.htm>>. Accessed September 25, 2000.
- CDC. Success in implementing Public Health Service guidelines to reduce perinatal transmission of HIV—Louisiana, Michigan, New Jersey, and South Carolina, 1993, 1995, and 1996. *MMWR* 1998;47:688-91. Available on the Internet at <[ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4733.pdf](http://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4733.pdf)>. Accessed November 21, 2000.

Legionellosis

- Kool JL, Carpenter JC, Fields BS. Effect of monochloramine disinfection of municipal drinking water on risk of nosocomial Legionnaires' disease. *Lancet* 1999;353:272-7.
- Fiore AE, Butler JC, Emori TG, Gaynes RP. A survey of methods used to detect nosocomial legionellosis among participants in the National Nosocomial Infections Surveillance System. *Infect Control Hosp Epidemiol* 1999;20:412-6.
- Kool JL, Bergmire-Sweet D, Butler JC, et al. Hospital characteristics associated with colonization of water systems by Legionella and risk of nosocomial legionnaires' disease: a cohort study of 15 hospitals. *Infect Control Hosp Epidemiol* 1999;20:798-805.
- Marston BJ, Lipman HB, Breiman RF. Surveillance for Legionnaires' disease. Risk factors for morbidity and mortality. *Arch Intern Med* 1994;154:2417-22.

Lyme Disease

- Orloski KA, Hayes EB, Campbell GL, Dennis DT. Surveillance for Lyme disease—United States, 1992-1998. In: CDC surveillance summaries, April 28, 2000. *MMWR* 2000;49(No. SS-3):1-11. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/ss/ss4903.pdf>>. Accessed November 21, 2000.
- Hayes EB, Maupin GO, Mount GA, Piesman J. Assessing the prevention effectiveness of local Lyme disease control. *J Public Health Manag Pract* 1999;5:84-92.

- CDC. Recommendations for the use of Lyme disease vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-7). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4807.pdf>>. Accessed November 21, 2000.
- Dennis DT. Epidemiology, ecology, and prevention of Lyme disease. In: Rahn D, Evans J, eds. Lyme disease. Philadelphia, PA: American College of Physicians, 1998:7-34.

Malaria

- Lobel HO, Kozarsky PE. Update on prevention of malaria for travelers. JAMA 1997;278:1767-71.
- Zucker JR. Changing patterns of autochthonous malaria transmission in the United States: a review of recent outbreaks. Emerg Infect Dis 1996;2:37-43. Available on the Internet at <<http://www.cdc.gov/ncidod/eid/vol2no1/zuckerei.htm>>. Accessed November 21, 2000.
- Zucker JR, Campbell CC. Malaria. Principles of prevention and treatment [Review]. Infect Dis Clin North Am 1993;7:547-67.

Measles

- CDC. Measles—United States, 1999. MMWR 2000;49:557-60. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4925.pdf>>. Accessed November 21, 2000.
- CDC. Epidemiology of measles—United States, 1998. MMWR 1999;48:749-53. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4834.pdf>>. Accessed November 21, 2000.
- CDC. Measles—United States, 1997. MMWR 1998;47:273-6. Available on the Internet at <<ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4714.pdf>>. Accessed November 21, 2000.
- CDC. Measles, mumps and rubella—vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1998;47(No. RR-8). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4708.pdf>>. Accessed November 21, 2000.

Meningococcal Disease

- CDC. Prevention and control of meningococcal disease, and meningococcal disease and college students: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(No. RR-7). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4907.pdf>>. Accessed November 21, 2000.
- CDC. Serogroup W-135 meningococcal disease among travelers returning from Saudi Arabia—United States, 2000. MMWR 2000;49:345-6. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4916.pdf>>. Accessed November 21, 2000.
- Rosenstein NE, Perkins BA, Stephens DS, et al. The changing epidemiology of meningococcal disease in the United States, 1992-1996. J Infect Dis 1999;180:1894-901.
- Diermayer M, Hedberg K, Hoesly FC, et al. Epidemic serogroup B meningococcal disease in Oregon: the evolving epidemiology of the ET-5 strain. JAMA 1999;281:1493-7. Available on the Internet at <<http://jama.ama-assn.org/issues/v281n16/full/joc81215.html>>. Accessed November 21, 2000.

Mumps

- CDC. Mumps surveillance—United States, 1988-1993. In: CDC surveillance summaries, August 11, 1995. MMWR 1995;44(No. SS-3). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/ss/ss4403.pdf>>. Accessed November 21, 2000.
- Briss PA, Fehrs LJ, Parker RA, et al. Sustained transmission of mumps in a highly vaccinated population: assessment of primary vaccine failure and waning vaccine-induced immunity. J Infect Dis 1994;169:77-82.
- Hersh BS, Fine PE, Kent WK, et al. Mumps outbreak in a highly vaccinated population. J Pediatr 1991;119:187-93.
- CDC. Recommendations of the Immunization Practices Advisory Committee on Mumps prevention. MMWR 1989;38:388-92, 397-400. Available on the Internet at <<http://www.cdc.gov/mmwr/preview/mmwrhtml/00001404.htm>>. Accessed November 21, 2000.

Pertussis

- Guris D, Strebel PM, Bardenheier B, et al. Changing epidemiology of pertussis in the United States: increasing reported incidence among adolescents and adults, 1990-1996. *Clin Infect Dis* 1999;28:1230-7.
- CDC. Notice to readers: FDA approval of a fourth acellular pertussis vaccine for use among infants and young children. *MMWR* 1998;47:934-6. Available on the Internet at <ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4743.pdf>. Accessed November 21, 2000.
- CDC. Pertussis vaccination: use of acellular pertussis vaccines among infants and young children. Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1997;46(No. RR-7). Available on the Internet at <http://www.cdc.gov/mmwr/PDF/rr/rr4607.pdf>. Accessed November 21, 2000.

Plague

- Inglesby TV, Dennis DT, Henderson DA, et al. Plague as a biological weapon: medical and public health management. Working Group on Civilian Biodefense [Review]. *JAMA* 2000;283:2281-90.
- Dennis DT, Gage KL, Gratz N, Poland JD, Tikhomirov E. Plague manual: epidemiology, distribution, surveillance and control. Geneva, Switzerland: World Health Organization, 1999.
- Poland JD, Dennis DT. Plague. In: Evans AS, Brachman PS, eds. Bacterial infections of humans: epidemiology and control. 3rd ed. New York, NY: Plenum Medical Book Company, 1998:545-58.

Poliomyelitis, Paralytic

- CDC. Poliomyelitis prevention in the United States: updated recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2000;49(No. RR-5). Available on the Internet at <http://www.cdc.gov/mmwr/PDF/rr/rr4905.pdf>. Accessed November 21, 2000.
- Prevots DR, Khetsuriani N, Wharton M. Evidence for a decline in the number of vaccine-associated paralytic poliomyelitis cases in the United States following implementation of a sequential poliovirus vaccination schedule, 1997-1998. Presented at the 36th annual meeting of the Infectious Disease Society of America, November 12-15, 1998.
- Prevots DR, Sutter RW, Strebel PM, Weibel RE, Cochi SL. Completeness of reporting for paralytic poliomyelitis, United States, 1980 through 1991. Implications for estimating the risk of vaccine-associated disease. *Arch Pediatr Adolesc Med* 1994;148:479-85.

Psittacosis

- CDC. Compendium of measures to control *Chlamydia psittaci* among humans (psittacosis) and pet birds (avian chlamydiosis), 2000. *MMWR* 2000;49(No. RR-8):1-17. Available on the Internet at <http://www.cdc.gov/mmwr/PDF/rr/rr4908.pdf>. Accessed November 21, 2000.
- Moroney JF, Guevara R, Iverson C, et al. Detection of chlamydiosis in a shipment of pet birds, leading to recognition of an outbreak of clinically mild psittacosis in humans. *Clin Infect Dis* 1998;26:1425-9.
- Jorgensen DM. Gestational psittacosis in a Montana sheep rancher. *Emerg Infect Dis* 1997;2:191-4. Available on the Internet at <http://www.cdc.gov/ncidod/eid/vol3no2/jorgen.htm>. Accessed November 21, 2000.
- Wong KH, Skelton SK, Daugharty H. Utility of complement fixation and microimmunofluorescence assays for detecting serologic responses in patients with clinically diagnosed psittacosis. *J Clin Microbiol* 1994;32:2417-21.

Rabies, Animal and Human

- CDC. Compendium of animal rabies prevention and control, 2000: National Association of State and Territorial Public Health Veterinarians, Inc. *MMWR* 2000;49(No. RR-8):19-30. Available on the Internet at <http://www.cdc.gov/mmwr/PDF/rr/rr4908.pdf>. Accessed November 21, 2000.
- CDC. Human rabies prevention—United States, 1999: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1999;48(No. RR-1). Available on the Internet at <http://www.cdc.gov/mmwr/PDF/rr/rr4801.pdf>. Accessed November 21, 2000.
- Krebs JW, Smith JS, Rupprecht CE, Childs JE. Rabies surveillance in the United States during 1998. *J Am Vet Med Assoc* 1999;215:1786-98.

Noah DL, Drenzek CL, Smith JS, et al. Epidemiology of human rabies in the United States, 1980 to 1996 [Review]. *Ann Intern Med* 1998;128:922-30.

Rocky Mountain Spotted Fever

- Paddock CD, Greer PW, Ferebee TL, et al. Hidden mortality attributable to Rocky Mountain spotted fever: immunohistochemical detection of fatal, serologically unconfirmed diseases. *J Infect Dis* 1999;179:1469-76.
- Thorner AR, Walker DH, Petri WA, Jr. Rocky Mountain spotted fever [Review]. *Clin Infect Dis* 1998;27:1353-9.
- Dalton MJ, Clarke MJ, Holman RC, et al. National surveillance for Rocky Mountain spotted fever, 1981-1992: epidemiologic summary and evaluation of risk factors for fatal outcome. *Am J Trop Med Hyg* 1995;52:405-13.

Rubella and Rubella, Congenital Syndrome

- Reef SE, Plotkin S, Cordero JF, et al. Preparing for elimination of Congenital Rubella Syndrome (CRS): summary of a workshop on CRS elimination in the United States. *Clin Infect Dis* 2000;31:85-95.
- CDC. Rubella among Hispanic adults—Kansas, 1998, and Nebraska, 1999. *MMWR* 2000;49:225-8. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4911.pdf>>. Accessed November 21, 2000.
- CDC. Rubella outbreak—Westchester County, New York, 1997-1998. *MMWR* 1999;48:560-3. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4826.pdf>>. Accessed November 21, 2000.

Salmonellosis

- Van Beneden CA, Keene WE, Strang RA, et al. Multinational outbreak of *Salmonella enterica* serotype Newport infections due to contaminated alfalfa sprouts. *JAMA* 1999;281:158-62. Available on the Internet at <<http://jama.ama-assn.org/issues/v281n2/full/joc80937.html>>. Accessed December 8, 2000.
- Mahon BE, Slutsker L, Hutwagner L, et al. Consequences in Georgia of a nationwide outbreak of *Salmonella* infections: what you don't know might hurt you. *Am J Public Health* 1999;89:31-5.
- Glynn MK, Bopp C, Dewitt WK, Dabney P, Mokhtar M, Angulo FJ. Emergence of multidrug-resistant *Salmonella enterica* serotype typhimurium DT104 infections in the United States. *N Engl J Med* 1998;338:1333-8.
- CDC. Multistate outbreak of *Salmonella* serotype Agona infections linked to toasted oats cereal—United States, April-May, 1998. *MMWR* 1998;47:462-4. Available on the Internet at <<ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4722.pdf>>. Accessed November 21, 2000.

Shigellosis

- CDC. Outbreak of gastroenteritis associated with an interactive water fountain at a beachside park—Florida, 1999. *MMWR* 2000;49:565-8. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4925.pdf>>. Accessed November 21, 2000.
- CDC. Outbreaks of *Shigella sonnei* infection associated with eating fresh parsley—United States and Canada, July-August 1998. *MMWR* 1999;48:285-9. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4814.pdf>>. Accessed November 21, 2000.
- Sobel J, Cameron DN, Ismail J, et al. A prolonged outbreak of *Shigella sonnei* infections in traditionally observant Jewish communities in North America caused by a molecularly distinct bacterial subtype. *J Infect Dis* 1998;177:1405-8.
- Mohle-Boetani JC, Stapleton M, Finger R, et al. Communitywide shigellosis: control of an outbreak and risk factors in child day-care centers. *Am J Public Health* 1995;85:812-6.

Streptococcal Disease, Invasive, Group A

- CDC. Nosocomial group A streptococcal infections associated with asymptomatic health-care workers—Maryland and California, 1997. *MMWR* 1999;48:163-6. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4808.pdf>>. Accessed November 21, 2000.

- Anonymous. Prevention of invasive group A streptococcal disease among household contacts of case-patients: is prophylaxis warranted? The Working Group on Prevention of Invasive Group A Streptococcal Infections. *JAMA* 1998;279:1206-10.
- Davies HD, McGeer A, Schwartz B, et al, and the Ontario Group A Streptococcal Study Group. Invasive group A streptococcal infections in Ontario, Canada. *N Engl J Med* 1996;335:547-54.
- Anonymous. Defining the group A streptococcal toxic shock syndrome: rationale and consensus definition. The Working Group on Severe Streptococcal Infections. *JAMA* 1993;269:390-1.

***Streptococcus pneumoniae*, Drug-Resistant, Invasive Disease**

- CDC. Active Bacterial Core Surveillance. National Center for Infectious Diseases. Available at <<http://www.cdc.gov/ncidod/dbmd/abc>>. Accessed June 23, 2000.
- Dowell SF, Butler JC, Giebink GS, et al. Acute otitis media: management and surveillance in an era of pneumococcal resistance—a report from the Drug-Resistant *Streptococcus pneumoniae* Therapeutic Working Group. *Pediatr Infect Dis J* 1999;18:1-9.
- Dowell SF. Principles of judicious use of antimicrobial agents for pediatric upper respiratory tract infections. *Pediatrics* 1998;101(suppl):S163-S184.
- CDC. Defining the public health impact of drug-resistant *Streptococcus pneumoniae*: report of a working group. *MMWR* 1996;45(No. RR-1). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4501.pdf>>. Accessed November 21, 2000.

Syphilis, Congenital

- Southwick KL, Guidry HM, Weldon MM, Mertz KJ, Berman SM, Levine WC. An epidemic of congenital syphilis in Jefferson County, Texas, 1994-1995: inadequate prenatal syphilis testing after an outbreak in adults. *Am J Public Health* 1999;89:557-60.
- CDC. Congenital syphilis—United States, 1998. *MMWR* 1999;48:757-61. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4834.pdf>>. Accessed November 21, 2000.
- CDC. Guidelines for the prevention and control of congenital syphilis. *MMWR* 1988;37(No. S-1). Available on the Internet at <<http://www.cdc.gov/mmwr/preview/mmwrhtml/00026330.htm>>. Accessed November 21, 2000.

Syphilis, Primary and Secondary

- CDC. Sexually transmitted disease surveillance supplement 1999: syphilis surveillance report. Atlanta, GA: US Department of Health and Human Services, CDC, November 2000. Available on the Internet at <http://www.cdc.gov/nchstd/dstd/Stats_Trends/99Syphilis.htm>. Accessed November 21, 2000.
- CDC. The National Plan to Eliminate Syphilis from the United States. Atlanta, GA: US Department of Health and Human Services, CDC, National Center for HIV, STD, and TB Prevention, October 1999.
- CDC. Primary and secondary syphilis—United States, 1998. *MMWR* 1999;48:873-8. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4839.pdf>>. Accessed November 21, 2000.
- CDC. Resurgent bacterial sexually transmitted disease among men who have sex with men—King County, Washington, 1997-1999. *MMWR* 1999;48:773-7. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4835.pdf>>. Accessed November 21, 2000.

Tetanus

- Bardenheier B, Prevots DR, Khetsuriani N, Wharton M. Tetanus surveillance—United States, 1995-1997. In: CDC surveillance summaries, July 3, 1998. *MMWR* 1998;47(No. SS-2):1-13. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/ss/ss4702.pdf>>. Accessed November 21, 2000.
- CDC. Neonatal tetanus—Montana, 1998. *MMWR* 1998;47:928-30. Available on the Internet at <<ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4743.pdf>>. Accessed November 21, 2000.
- CDC. Tetanus among injecting-drug users—California, 1997. *MMWR* 1998;47:149-51. Available on the Internet at <<ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/mm4708.pdf>>. Accessed November 21, 2000.

Gergen PJ, McQuillan GM, Kiely M, Ezzati-Rice TM, Sutter RW, Virella G. A population-based serologic survey of immunity to tetanus in the United States. *N Engl J Med* 1995;332:761-6.

Toxic-Shock Syndrome

- Hajjeh RA, Reingold R, Weil A, Shutt K, Schuchat A, Perkins BA. Toxic shock syndrome in the United States: surveillance update, 1979-1996. *Emerg Infect Dis* 1999;5:807-10. Available on the Internet at <<http://www.cdc.gov/ncidod/eid/vol5no6/hajjeh.htm>>. Accessed November 21, 2000.
- Schuchat A, Broome CV. Toxic shock syndrome and tampons. *Epidemiol Rev* 1991;13:99-112.
- CDC. Reduced incidence of menstrual toxic-shock syndrome—United States, 1980-1990. *MMWR* 1990;39:421-3. Available on the Internet at <<http://www.cdc.gov/mmwr/preview/mmwrhtml/00001651.htm>>. Accessed November 21, 2000.
- Gaventa S, Reingold AL, Hightower AW, et al. Active surveillance for toxic shock syndrome in the United States, 1986. *Rev Infect Dis* 1989;11(suppl):S28-S34.

Trichinosis

- Moorhead A, Grunenwald PE, Dietz VJ, Schantz PM. Trichinellosis in the United States, 1991-1996: declining but not gone. *Am J Trop Med Hyg* 1999;60:66-9.
- CDC. Outbreak of trichinellosis associated with eating cougar jerky—Idaho, 1995. *MMWR* 1996;45:205-6. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4510.pdf>>. Accessed November 21, 2000.
- McAuley JB, Michelson MK, Schantz PM. Trichinosis surveillance, United States, 1987-1990. In: CDC surveillance summaries, December 1991. *MMWR* 1991;40(No. SS-3):35-42.

Tuberculosis

- CDC. Reported tuberculosis in the United States, 1999. Atlanta, GA: US Department of Health and Human Services, CDC, August 2000. Available on the Internet at <<http://www.cdc.gov/nchstp/tb/>>. Accessed November 21, 2000.
- CDC. Progress toward the elimination of tuberculosis—United States, 1998. *MMWR* 1999;48:732-6. Available on the Internet at <<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4833a2.htm>>. Accessed November 21, 2000.

Typhoid Fever

- Ackers ML, Puhf ND, Tauxe RV, Mintz ED. Laboratory-based surveillance of *Salmonella* Serotype *Typhi* infections in the United States: antimicrobial resistance on the rise. *JAMA* 2000;283:2668-73.
- Mermin JH, Villar R, Carpenter J, et al. A massive epidemic of multidrug-resistant typhoid fever in Tajikistan associated with consumption of municipal water. *J Infect Dis* 1999;179:1416-22.
- Mermin JH, Townes JM, Gerber M, Dolan N, Mintz ED, Tauxe RV. Typhoid fever in the United States, 1985-1994: changing risks of international travel and increasing antimicrobial resistance. *Arch Intern Med* 1998;158:633-8.
- CDC. Typhoid immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1994;43(No. RR-14). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4314.pdf>>. Accessed November 21, 2000.

Varicella; Varicella Deaths

- CDC. National, state, and urban area vaccination coverage levels among children aged 19-35 months—United States, 1999. *MMWR* 2000;49:585-9. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4926.pdf>>. Accessed November 21, 2000.
- CDC. Varicella-related deaths—Florida, 1998. *MMWR* 1999;48:379-81. Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/wk/mm4818.pdf>>. Accessed November 21, 2000.
- CDC. Prevention of varicella: updated recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1999;48(No. RR-6). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4806.pdf>>. Accessed November 21, 2000.
- CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1996;45(No. RR-11). Available on the Internet at <<http://www.cdc.gov/mmwr/PDF/rr/rr4511.pdf>>. Accessed November 21, 2000.

State and Territorial Epidemiologists and Laboratory Directors

State and Territorial Epidemiologists and Laboratory Directors are acknowledged for their contributions to *CDC Surveillance Summaries*. The epidemiologists and the laboratory directors listed below were in the positions shown as of March 2001.

State/Territory	Epidemiologist	Laboratory Director
Alabama	John P. Lofgren, MD	William J. Callan, PhD
Alaska	John P. Middaugh, MD	Bernard Jilly, PhD
Arizona	Norman Peterson, MD, MPH	Wes B. Press, MS
Arkansas	Thomas C. McChesney, DVM	Michael G. Foreman
California	Duc Vugia, MD, MPH	Paul Kimsey, PhD
Colorado	Richard E. Hoffman, MD, MPH	Ronald L. Cada, DrPH
Connecticut	James L. Hadler, MD, MPH	Katherine Kelley, DrPH
Delaware	A. LeRoy Hathcock, PhD	Jane Getchall, DrPH
District of Columbia	Martin E. Levy, MD, MPH	Maurice Knuckles, PhD (Acting)
Florida	Richard S. Hopkins, MD, MSPH	Ming S. Chan, PhD
Georgia	Paul Blake, MD, MPH	Elizabeth A. Franko, DrPH
Hawaii	Paul V. Effler, MD, MPH	Vernon K. Miyamoto, PhD
Idaho	Christine G. Hahn, MD	Richard H. Hudson, PhD
Illinois	Mark Dworin, MD, MPH	David L. Maserang, PhD
Indiana	Robert Teclaw, DVM, PhD, MPH	David E. Nauth
Iowa	M. Patricia Quinlisk, MD, MPH	Mary J. R. Gilchrist, PhD
Kansas	Gianfranco Pezzino, MD, MPH	Theresa Hodges (Acting)
Kentucky	Glyn G. Caldwell, MD	Samuel B. Gregorio, DrPH
Louisiana	Raoult Ratard, MD, MPH	Henry B. Bradford, Jr, PhD
Maine	Kathleen F. Gensheimer, MD, MPH	John A. Krueger
Maryland	Jeffrey Roche, MD, MPH	J. Mehsen Joseph, PhD
Massachusetts	Alfred DeMaria, Jr, MD	Ralph J. Timperi, MPH
Michigan	Matthew L. Boulton, MD, MPH	Frances Pouch Downes, DrPH
Minnesota	Richard Danila, PhD, MPH	Norman Crouch, PhD
Mississippi	Mary Currier, MD, MPH	Joe O. Graves, PhD
Missouri	Eduardo Simoes, MSPH	Eric C. Blank, DrPH
Montana	Todd A. Damrow, PhD, MPH	Mike Spence, MD
Nebraska	Thomas J. Safranek, MD	Steve Hinrichs, MD
Nevada	Randall L. Todd, DrPH	L. Dee Brown, MD, MPH
New Hampshire	Jesse Greenblatt, MD, MPH	Veronica C. Malmberg, MSN
New Jersey	Eddy A. Bresnitz, MD, MS	S. I. Shahied, PhD
New Mexico	Mack C. Sewell, DrPH, MS	David E. Mills, PhD
New York City	Benjamin A. Mojica, MD, MPH	Alex Ramon, MD, MPH
New York State	Perry F. Smith, MD	Lawrence S. Sturman, MD, PhD
North Carolina	Newton J. MacCormack, MD, MPH	Lou F. Turner, DrPH
North Dakota	Larry A. Shireley, MPH, MS	Bonna R. Cunningham
Ohio	Forrest W. Smith, MD	William Becker, DO
Oklahoma	J. Michael Crutcher, MD, MPH	John Hitz, DrPH
Oregon	Melvin Kohn, MD, MPH	Michael R. Skeels, PhD, MPH
Pennsylvania	James T. Rankin, Jr, DVM, PhD, MPH	Bruce Kleger, DrPH
Rhode Island	Utpala Bandyopadhyay, MD, MPH	Gregory Hayes, DrPH
South Carolina	James J. Gibson, MD, MPH	Harold Dowda, PhD
South Dakota	Sarah L. Patrick, PhD, MPH	Michael Smith
Tennessee	William L. Moore, Jr, MD	Michael W. Kimberly, DrPH
Texas	Dennis Perrotta, PhD, CIC	Susan Neill, PhD, MBA
Utah	Craig R. Nichols, MPA	Charles D. Brokopp, DrPH
Vermont	Peter D. Galbraith, DMD, MPH	Burton W. Wilcke, Jr, PhD
Virginia	Robert B. Stroube, MD, MPH	James L. Pearson, DrPH
Washington	Juliet VanEenwyk, PhD (Acting)	John Kobayashi, MD, MPH
West Virginia	Loretta E. Haddy, MS, MA	Andrea Labik, PhD
Wisconsin	Jeffrey P. Davis, MD	Ronald H. Laessig, PhD
Wyoming	Karl Musgrave, DVM, MPH	Richard Harris, PhD
American Samoa	Joseph Tufa, DSM, MPH	Joseph Tufa, DSM, MPH
Federated States of Micronesia		
Guam	Jean-Paul Chaine	
Marshall Islands	Robert L. Haddock, DVM, MPH	Aurelto S. Espinola, MD
Northern Mariana Islands	Tom D. Kijner	
Palau	Jose L. Chong, MD	Joseph K.P. Villagomez
Puerto Rico		
Virgin Islands	Carmen C. Deseda, MD, MPH	José Luis Miranda Arroyo, MD
	Jose Poblete, MD (Acting)	Norbert Mantor, PhD

MMWR

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to listserv@listserv.cdc.gov. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at <http://www.cdc.gov/mmwr/> or from CDC's file transfer protocol server at <ftp://ftp.cdc.gov/pub/Publications/mmwr/>. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to: Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone (888) 232-3228.

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

☆U.S. Government Printing Office: 2001-633-173/48220 Region IV

**DEPARTMENT OF
HEALTH AND HUMAN SERVICES**
Centers for Disease Control
and Prevention (CDC)
Atlanta, Georgia 30333

Official Business
Penalty for Private Use \$300
Return Service Requested

1 9907 93036 L20561
UNIVERSITY MICROFILMS
SERIALS ACQUISITION DEPT
300 NORTH ZEEB ROAD
ANN ARBOR MI 48103-1553

0001

FIRST-CLASS MAIL
POSTAGE & FEES PAID
P/S/CDC
Permit No. G-264

